

DOCUMENT RESUME

ED 073 262

VT 018 792

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IDENTIFIERS Educational Resources Information Center; \*ERIC

ABSTRACT

This compilation of ERIC abstracts dealing with the construction process is the third in a series that identifies research and instructional materials in selected occupational clusters. Approximately 130 documents were identified by means of computer searches of "Research in Education" from 1967 through December 1972. Instructions on how to use ERIC reference products are included. Intended for use in career education curriculum development, these abstracts include lists of descriptors, identifiers, and other pertinent information about documents in the occupational cluster of construction. This document is related to 14 other cluster groupings, available as VT 018 790, VT 018 791, VT 018 793, and VT 018 897-VT 018 907. (AG)

ED 073262

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EDUCATION & WELFARE  
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Cluster Series 3

CONSTRUCTION (Construction Process)

Occupational Cluster Series

Abstracts of Instructional and  
Research Materials

Compiled by

David H. Miller  
Allen B. Moore

1973

The Center for Vocational and Technical Education  
The Ohio State University  
1960 Kenny Road  
Columbus, Ohio 43210

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VTO18782

#### MISSION OF THE CENTER

The Center for Vocational and Technical Education is an independent unit on The Ohio State University campus. It serves a catalytic role in establishing consortia to focus on relevant problems in vocational and technical education. The Center is comprehensive in its commitment and responsibility, multidisciplinary in its approach and interinstitutional in its program.

The Center's mission is to strengthen the capacity of state educational systems to provide effective occupational education programs consistent with the individual needs and manpower requirements by:

- Conducting research and development to fill voids in existing knowledge and to develop methods for applying knowledge.
- Programmatic focus on state leadership development, vocational teacher education, curriculum, vocational choice and adjustment.
- Stimulating and strengthening the capacity of other agencies and institutions to create durable solutions to significant problems.
- Providing a national information storage, retrieval and dissemination system for vocational and technical education through the affiliated ERIC Clearinghouse.

This publication was prepared pursuant to a contract with the National Institute of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official National Institute of Education position or policy.

## PREFACE

Finding and using relevant information frequently is a major task for curriculum specialists, teachers, administrators and students. The Center for Vocational and Technical Education is dedicated to making useful and vital information accessible so that it may be used to improve school practices.

The Center has assembled, under one cover, research materials and instructional materials related to the Construction (Construction Process) occupational cluster. The materials included in this compilation, in the form of abstracts, are selections from Research in Education (RIE), Abstracts of Instructional Materials in Vocational and Technical Education (AIM), and Abstracts of Research Materials in Vocational and Technical Education (ARM) from 1967 to June, 1972.

Other compilations of abstracts in the occupational cluster series, of which this is a part, include the areas of arts and humanities, natural resources, government, transportation, communication, trade, finance, education, health, welfare, recreation and entertainment, product services, manufacturing, and personal services.

We are indebted to Allen B. Moore, project director, Supportive Information for the Comprehensive Career Education Model, and David H. Miller, Information Specialist who coordinated the compilation of this publication.

We hope that this publication will prove valuable to you in your particular endeavor.

Robert E. Taylor  
Director  
The Center for Vocational  
and Technical Education

## Construction (Construction Process)

### INTRODUCTION

This compilation of ERIC abstracts is the third in a series of publications which identify research and instructional materials dealing with selected occupational clusters. The 15 cluster areas included in the series have been identified by educational specialists as a means of suggesting a structure for career education curriculum development.

Other compilations of ERIC abstracts are available for the following cluster areas:

- . Arts and Humanities--available as VT 018 790
- . Government (Administrative Body) available as VT 018 793
- . Natural Resources--available as VT 018 791
- . Transportation--available as VT 018 907
- . Communication--available as VT 018 897
- . Trade (Marketing) available as VT 018 898
- . Finance (Banking) available as VT 018 899
- . Education--available as VT 018 900
- . Health--available as VT 018 901
- . Welfare--available as VT 018 902
- . Personal (Human) Services--available as VT 018 903
- . Product Services--available as VT 018 904
- . Recreation and Entertainment--available as VT 018 905
- . Manufacturing--available as VT 018 906

Construction (Construction Process)

INDEX/RETRIEVAL TERMS

This compilation of abstracts represents selected documents identified from a search strategy which included the following ERIC terms:

Instruction  
Curriculum  
Guides  
Manuals  
Resource Materials  
Teaching  
Housing Industry  
Building Trades  
Cement Industry  
Road Construction  
Construction

Each ERIC document indexed by certain combinations of these terms resulted in a computer "hit". Each time a "hit" was registered, an abstract along with its complete bibliographic citation was printed. Each abstract included in the initial computer printout was screened for relevance by information specialists at The Center prior to the development of this compilation. For a detailed explanation of computer searching see VT 018 425, ERIC Instructional Package for Vocational Educators.

## How to Use ERIC Reference Products

Each ERIC reference publication includes:

1. Document Resume Section containing abstracts and bibliographic information
2. Subject and Author Index Section

Each resume presents information about a document's content, its source and availability. Sample resumes on the following pages are explained in detail.

The indexes help to locate the abstracts by page numbers and accession numbers. These indexes are: Subject Index, Author Index and Conversion of Document Number Index. Index terms used in the subject index are ERIC descriptors. Each document has been assigned several of these descriptors; therefore, each document title appears in the subject index several times.

The full texts of documents are available from the original sources or from the ERIC Document Reproduction Service (EDRS) as microfiche or xerox reproductions.

Format of  
Research in Education (RIE)  
Document Resume

ED 039 349

Clearinghouse Accession Number

ED Accession Number

VT 010 981

Title of Document

ED 039 349  
From School to Work; A Pilot Study.  
New York State Education Dept., Albany. Bu-  
reau of Guidance.  
Pub Date Aug 69  
Note—25p.

EDRS Price MF-\$0.25 HC-\$1.35  
Descriptors—Community Involvement. \*Employ-  
ment Problems. Employment Services. \*Pilot  
Projects. School Role. \*Vocational Adjustment.  
\*Vocational Development. Work Environment.  
\*Youth Problems

Institutional Source--The  
Organization Responsible  
for the Report

The problems which youth face in the transi-  
tion from school to work are complex and chal-  
lenging. Such problems have been conceptualized  
into a model which relates specific problems to  
dimensions of self and environment in three  
developmental stages: (1) pretransitional—the life  
period before an individual is activated to seeking  
his first full-time job, (2) transitional—marked by  
activation to seek first full-time employment, oc-  
curring during grade 12 for about one-half of  
high school students, and (3) post-transitional—the  
first job. Using this model, perceptions of the vo-  
cational development of New York youth were  
obtained from staff members in 40 schools, 27  
employers, and 14 new workers. Suggestions for  
programs, activities, and facilities are tabulated  
by problem area, and public factors are ranked  
by strength score. The strongest transitional needs  
were identified in areas of preparatory education  
and training, occupational information, self-ac-  
tualization, worker role, job placement, mobility,  
and occupational mobility. There was no attempt  
to investigate causative factors; however, some  
causal inferences are drawn. Recommendations  
are included. (CH)

Availability of Document

Terms Under Which Document  
is Indexed in Subject Index  
(Only terms that are preceded  
by an asterisk appear in The  
Subject Index)

Abstract of Document

Format or

ARM and AIM Document Resume

Clearinghouse Accession  
Number--"VT" Denotes  
Vocational-Technical

Personal Author(s)

Title of Document

Institutional  
Source--The  
Organization  
Responsible for the  
Report (Bureau of  
Labor Statistics is  
listed in the  
Personal and Insti-  
tutional Author  
Index)

Availability of  
Document

Terms Under Which  
Document is Indexed  
in Subject Index--  
(only terms that  
are preceded by an  
asterisk appear in  
the Subject Index)

Abstract of Report

ERIC Document Accession Number--  
Resumes of Documents with "ED" Prefix  
Are Listed in Research in Education.

VT 014 005 ED 056 185  
SMITH, GERARD C.; CROWLEY, MICHAEL F.  
OCCUPATIONAL MANPOWER AND TRAINING NEEDS;  
INFORMATION FOR PLANNING TRAINING PROGRAMS  
FOR THE 1970'S.

BUREAU OF LABOR STATISTICS (BLS), WASHINGTON,  
D.C. DIV. OF MANPOWER AND OCCUPATIONAL  
OUTLOOK.

EDRS PRICE MF-\$ .65 HC-\$ 3.29.  
BULL-1701

SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT  
PRINTING OFFICE, WASHINGTON, D.C. 20402  
 (\$.75)  
PUB DATE - 71 87P.

DESCRIPTORS - \*EMPLOYMENT PROJECTIONS;  
\*MANPOWER NEEDS; EDUCATIONAL PLANNING;  
\*EDUCATIONAL NEEDS; EMPLOYMENT TRENDS;  
\*EMPLOYMENT STATISTICS; \*EDUCATIONAL SUPPLY;  
VOCATIONAL EDUCATION

ABSTRACT - THIS BULLETIN SUMMARIZES THE  
BUREAU OF LABOR STATISTICS EMPLOYMENT  
PROJECTIONS WHICH ARE AVAILABLE AND DISCUSSES  
THEIR USE IN LOCAL EDUCATIONAL PLANNING.  
INCLUDED ARE MATERIAL ON PROJECTIONS OF  
FUTURE MANPOWER NEEDS, INFORMATION ON  
OCCUPATIONAL TRAINING PROGRAMS, AND  
STATISTICS BY OCCUPATION ON MANPOWER NEEDS,  
ANNUAL OPENINGS, TRAINING METHODS, AND  
NUMBERS OF GRADUATES. (BH)

## Document Ordering Instructions

All documents cited in this compilation of abstracts are available in their full text. Availability is by one of the options listed below:

### 1. ORIGINAL COPY FROM PUBLISHER OR SUPPLIER

These documents have an availability listed in the resume. Often such documents are not available by any other means.

### 2. MICROFICHE AND HARD COPY REPRODUCTION

Documents with ED numbers are usually available individually on microfiche (\$0.65 a title) or paper copy (xerox - \$3.29 per 100 pages or fraction thereof) from:

ERIC Document Reproduction Service (EDRS)  
P. O. Drawer 0  
Bethesda, Maryland 20014

Orders must specify ED number.

### 3. MICROFICHE SETS

Documents with VT numbers only are not available as individual microfiche, but most are part of VT-ERIC microfiche sets.

A microfiche set contains all the documents announced in a single issue of Abstracts of Instructional Materials in Vocational and Technical Education (AIM) or Abstracts of Research Materials in Vocational and Technical Education (ARM) which are not available by one of the options outlined above. These documents are filmed continuously in VT number order, and each set is assigned a single ED number.

VT-ERIC microfiche sets are available

- a. In any complete collection of ERIC microfiche.
- b. As VT-ERIC microfiche sets purchased individually.
- c. From institutions (e.g., state research co-ordinating units) which have the VT-ERIC microfiche sets and are willing to provide microfiche duplicates of individual VT-numbered documents.

CONSTRUCTION (Construction Process)

Occupational Cluster Series

Abstracts of Instructional and  
Research Materials

ACCESSION NUMBERS: ED 010200

2

PROGRAM AREA: 58

PUBLICATION DATE: 31 AUG 76

TITLE: CONSTRUCTION CLUSTER--AN INVESTIGATION AND DEVELOPMENT OF THE CLUSTER CONCEPT AS A PROGRAM IN VOCATIONAL EDUCATION AT THE SECONDARY SCHOOL LEVEL.

PERSONAL AUTHOR: MALEY, DONALD

INSTITUTION CODE: LYR45975

DESCRIPTOR: \*CONSTRUCTION NEEDS; \*COURSE ORGANIZATION; EDUCATIONAL OBJECTIVES; \*INDUSTRIAL ARTS; INSTRUCTIONAL MATERIALS; OCCUPATIONAL GUIDANCE; OCCUPATIONAL INFORMATION; PROGRAM DEVELOPMENT; PROGRAM EVALUATION; PROGRAM GUIDES; \*PROGRAM PLANNING; SECONDARY EDUCATION; TASK PERFORMANCE; \*TEACHING GUIDES; \*VOCATIONAL EDUCATION

IDENTIFIER: COLLEGE PARK; MARYLAND

EDRS PRICE: EDRS PRICE MF-\$0.45 HC-\$11.24

DESCRIPTIVE NOTE: 281P.

ISSUE: DH6667

THIS COURSE OUTLINE IN CONSTRUCTION IS PART OF THE FINAL REPORT ON "CLUSTER CONCEPT" COURSES IN VOCATIONAL EDUCATION FOR SECONDARY EDUCATION (ED 010 301). EACH JOB ENTRY TASK WAS ANALYZED FOR HUMAN REQUIREMENTS (COMMUNICATION, MEASUREMENT, MATHEMATICS, SCIENCE, SKILLS, AND INFORMATION) NECESSARY TO PERFORMANCE OF THE TASK. THE TASK STATEMENTS FOR CARPENTRY, ELECTRICITY, MASONRY, PAINTING, AND PLUMBING WERE WRITTEN IN BEHAVIORAL TERMS WHICH PROVIDE THE INSTRUCTOR WITH A DESCRIPTION OF WHAT THE STUDENT SHOULD BE ABLE TO DO AFTER HE HAS HAD THE LEARNING EXPERIENCE. INSTRUCTIONAL SEQUENCES WERE PROVIDED AT THE END OF THE TASK ANALYSIS SECTION TO AID THE TEACHER IN DEVELOPING LESSON PLANS, MATERIALS OF INSTRUCTION, AND VISUAL AIDS. (FOR OTHER COURSE OUTLINES SEE ED 010 303 AND ED 010 304.) (GC)

REPORT NUMBER: RR-5-0183-F; ER-11F-6

CONTRACT NUMBER: OEC-684-923

INSTITUTION NAME: MARYLAND UNIV., COLLEGE PARK.

ACCESSION NUMBERS: EDC12956 VT00324

3

PUBLICATION DATE: AUG66

TITLE: READING ASSIGNMENT OUTLINES FOR INDUSTRIAL TECHNOLOGY I, THE WORLD OF CONSTRUCTION.

INSTITUTION CODE: JIM35LRG; RUF67125

DESCRIPTOR: \*CONSTRUCTION (PROCESS); \*CURRICULUM GUIDES; GRADE 7; \*INDUSTRIAL ARTS; \*READING ASSIGNMENTS; UNITS OF STUDY (SUBJECT FILES)

IDENTIFIER: INDUSTRIAL ARTS CURRICULUM PROJECT; INDUSTRIAL TECHNOLOGY

EDRS PRICE: EDPS PRICE MF-\$1.00 HC-\$4.12

DESCRIPTIVE NOTE: 228P.

ISSUE: CURRENT

THE PURPOSE OF THIS ATTACHMENT TO THE FINAL REPORT OF THE FIRST PHASE OF THE INDUSTRIAL ARTS CURRICULUM PROJECT (VT 003 145) IS TO PRESENT OUTLINES OF DAILY READING ASSIGNMENTS FOR A 170-DAY COURSE IN CONSTRUCTION AT THE SEVENTH GRADE LEVEL. UNITS ARE -- (1) MAN REMAKES HIS WORLD, (2) MANAGEMENT IN CONSTRUCTION, (3) PRODUCTION IN CONSTRUCTION, (4) WORKING IN CONSTRUCTION, AND (5) COMMUNITY DEVELOPMENT. A TYPICAL DAY COVERS "CHANGING THE FORM OF MATERIALS" WITH THE FOLLOWING MAJOR DIVISIONS -- (1) SHAPING THE ENVIRONMENT, (2) WORKER CONTROL OVER MATERIALS, (3) PRACTICES OF MATERIAL HANDLING, (4) PRACTICES OF MATERIAL SEPARATING, (5) PRACTICES OF COMBINING MATERIALS, AND (6) PRACTICES OF FORMING MATERIALS. OTHER ATTACHMENTS ARE A (VT 003 203), B (VT 003 202), AND C (VT 003 210). (EM)

REPORT NUMBER: BR-S-0059-0

CONTRACT NUMBER: DEC-5-65-066

INSTITUTION NAME: ILLINOIS UNIV., CHAMPAIGN.; OHIO STATE UNIV., COLUMBUS.

ACCESSION NUMBERS: ED14854 FFCC0421

4

PUBLICATION DATE: 55

TITLE: THE DEVELOPMENT OF THE TEACHING SPACE DIVIDER.

PERSONAL AUTHOR: PELLOMY, CLEON C.; CAUDILL, WILLIAM W.

INSTITUTION CODE: XPT12576

DESCRIPTOR: BULLETIN BOARDS; CHALKBOARDS; CONSTRUCTION COSTS; DISPLAY PANELS;  
\*MOVABLE PARTITIONS; \*PREFABRICATION; \*SPACE DIVIDERS; \*TEACHING METHODS;  
\*VERTICAL WORK SURFACES

EDRS PRICE: EDRS PRICE MF-\$0.25 HC-\$0.24

DESCRIPTIVE NOTE: 4P.

ISSUE: CURRENT

TYPES OF VERTICAL WORK SURFACES AND THE DEVELOPMENT OF A MODEL TEACHING SPACE DIVIDER ARE DISCUSSED IN THIS REPORT. THIS DESIGN IS BASED ON THE EXPRESSED NEED FOR MORE TACKBOARD AND SHELVING SPACE, AND FOR MOBILE PARTITIONS. THE MODEL PANELS WHICH SERVE DIRECTLY AS PARTITIONS RATHER THAN BEING OVERLAID ON A PLASTERED SURFACE, INCLUDE THE FOLLOWING FUNCTIONS—(1) SERVING AS UNITS TO DIVIDE SPACE, (2) SERVING AS VERTICAL WORK SURFACES, AND (3) FACILITATING EASY INTERIOR CHANGES. FOUR TYPES OF SURFACE, PREFABRICATED ON A FOUR BY EIGHT FOOT MODULE, INCLUDE—(1) CHALKBOARD PANELS, PROVIDING A LARGE-SCALE WRITING AND DRAWING SURFACE, (2) DOWEL PANELS, PROVIDING SHELF AND EASEL SPACE, (3) TACKBOARDS, PROVIDING A FULL WALL AREA DISPLAY SPACE, AND (4) PERFORATED PANELS, PROVIDING AN ACUSTIC AND VERSATILE HANGING SURFACE. PANELS ARE MOUNTED DIRECTLY ON STUDS AND MAY BE REMOVED AND INTERCHANGED AS NEEDED. THIS SOLUTION IS ECONOMICAL AND SAVES OFTEN WASTED WALL SPACE. (NM)

REPORT NUMBER: RR-1

INSTITUTION NAME: CAUDILL, REWLETT, SCOTT AND ASSOCIATES, BRYAN, TEX.

ACCESSION NUMBERS: F0015635 FF00125c

5

PUBLICATION DATE: 65

TITLE: SCIENCE FACILITIES. A CLASSIFIED LIST OF LITERATURE RELATED TO DESIGN,  
CONSTRUCTION AND OTHER ARCHITECTURAL MATTERS.

INSTITUTION CODE: FGK57295

DESCRIPTOR: \*BIBLIOGRAPHIES; BUILDING DESIGN; CONSTRUCTION COSTS; DESIGN NEEDS;  
\*FACILITY CASE STUDIES; LABORATORIES; \*RESEARCH REVIEWS (PUBLICATIONS);  
\*RESOURCE MATERIALS; \*SCIENCE FACILITIES

EDRS PRICE: EDRS PRICE MF-\$0.25 HC-\$0.80

DESCRIPTIVE NOTE: 18P.

ISSUE: CUMREPT

A CLASSIFIED LIST OF ARTICLES, PAPERS AND CATALOGS IN THE SCIENCE FACILITIES  
COLLECTION OF THE ARCHITECTURAL SERVICES STAFF OF THE NATIONAL SCIENCE  
FOUNDATION IS PRESENTED WHICH MAY BE USEFUL IN SEARCHING FOR PERTINENT  
LITERATURE ON PROBLEMS IN THE DESIGN OF SCIENCE FACILITIES. CITATIONS COVER SUCH  
AREAS AS GENERAL PLANNING, SPACE UTILIZATION AND COST STUDIES, BUILDING TYPE  
STUDIES, CONSTRUCTION DETAILS, DESIGN CRITERIA AND EQUIPMENT SPECIFICATIONS.  
(BH)

INSTITUTION NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBERS: E0016370 EF001305.

6

PUBLICATION DATE: JAN68

TITLE: HOW 1967 AWARD WINNING SCHOOLS COMPARE.

DESCRIPTOR: CAMPUSES; CLOSED CIRCUIT TELEVISION; CLUSTER GROUPING;  
DECENTRALIZED SCHOOL DESIGN; \*ELEMENTARY SCHOOLS; HIGH SCHOOL DESIGN; HIGH  
SCHOOLS; \*JUNIOR HIGH SCHOOLS; LIBRARIES; MIDDLE SCHOOLS; OUTDOOR EDUCATION;  
SCHOOL CONSTRUCTION; \*SCHOOL DESIGN; \*SCHOOL PLANNING; SECONDARY SCHOOLS;  
\*SENIOR HIGH SCHOOLS; TEAM TEACHING

IDENTIFIER: AASA; AIA; COMPONENT SYSTEM

EORS PRICE: DOCUMENT NOT AVAILABLE FROM EORS.

ISSUE: CURRENT

THIS IS A 30 PAGE PORTFOLIO OF PHOTOS, FLOOR PLANS, AND COMPARATIVE STATISTICS  
ON 24 TREND-SETTING SCHOOLS. SCHOOLS INCLUDED WERE GIVEN DISTINGUISHED DESIGN  
AWARDS BY THE AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS AND STATE CHAPTERS  
OF THE AMERICAN INSTITUTE OF ARCHITECTS. TWELVE JUNIOR AND SENIOR HIGH SCHOOLS  
INCLUDED HAVE SUCH FEATURES AS THE CAMPUS PLAN, SYSTEM COMPONENTS, CLOSED  
CIRCUIT TV, SCHOOL-WITHIN-SCHOOL, AND CLUSTERS. ADDITIONAL FEATURES ARE FLEXIBLE  
PROGRAM SPACES, PATIO, ROUND SCHOOLS, AND LUNCH FACILITIES. FEATURES PRESENTED  
ABOUT ELEMENTARY SCHOOLS INCLUDE A DOME STRUCTURE FREE OF INTERIOR WALLS, A  
CLUMPED PLAN, HEXAGONAL SHAPES, POLYGONAL CLUSTERS, COMPONENT CONSTRUCTION, AND  
LIBRARY CENTRUM. OTHER FEATURES ARE SPECIALLY ADAPTED CONSTRUCTION FOR UNUSUAL  
SITES, OUTDOOR LABORATORY SPACES, ACCORDIAN CONCEPT, AND OCTAGONAL HOUSE PLAN.  
THIS ARTICLE APPEARED IN "NATION'S SCHOOLS," VOL. 81, NO. 1, JANUARY, 1968.  
COPIES MAY BE OBTAINED BY WRITING TO AARON COHODES, EDITOR, MCGRAW-HILL  
PUBLICATIONS, CIRCULATION DEPARTMENT, 1050 MERCHANDISE MART, CHICAGO, ILLINOIS  
60654. (RH)

ACCESSION NUMBERS: ED016642 VT004163

7

PUBLICATION DATE: AUG67

TITLE: THE PREPARATION OF CURRICULUM MATERIALS AND THE DEVELOPMENT OF TEACHERS FOR AN EXPERIMENTAL APPLICATION OF THE CLUSTER CONCEPT OF VOCATIONAL EDUCATION AT THE SECONDARY SCHOOL LEVEL. VOLUME II, INSTRUCTIONAL PLANS FOR THE CONSTRUCTION CLUSTER.

PERSONAL AUTHOR: MALEY, DONALD

INSTITUTION CODE: LYR45975

DESCRIPTOR: \*BUILDING TRADES; \*CURRICULUM GUIDES; GRADE 11; GRADE 12;  
\*OCCUPATIONAL CLUSTERS; \*TEACHING GUIDES; \*TRADE AND INDUSTRIAL EDUCATION

IDENTIFIER: \*CONSTRUCTION OCCUPATIONS

EDRS PRICE: EDRS PRICE MF-\$0.75 HC-\$6.30

DESCRIPTIVE NOTE: 157P.

ISSUE: CUMREPT

DESIGNED FOR USE WITH 11TH AND 12TH GRADE STUDENTS, THIS CURRICULUM GUIDE FOR THE OCCUPATIONAL CLUSTER IN CONSTRUCTION WAS DEVELOPED BY PARTICIPATING TEACHERS FROM RESULTS OF THE RESEARCH PROCEDURES DESCRIBED IN VOLUME I (VT 004 162). THE COURSE DESCRIPTION, NEED FOR THE COURSE, COURSE OBJECTIVES, PROCEDURE, AND INSTRUCTIONAL PLAN ARE DISCUSSED BRIEFLY. THE TASKS AND AREAS OF HUMAN REQUIREMENTS ARE ARRANGED IN AN INSTRUCTIONAL SEQUENCE FOR EACH OCCUPATION INCLUDED IN THE CONSTRUCTION CLUSTER--(1) CARPENTRY, (2) ELECTRICITY, (3) MASONRY, (4) PAINTING, AND (5) PLUMBING. SUGGESTED TEACHING METHODS, INSTRUCTIONAL MATERIALS, STUDENT ACTIVITIES, AND EVALUATION PROCEDURES ARE ARRANGED IN COLUMNS OPPOSITE EACH AREA OF HUMAN REQUIREMENT. AN INSTRUCTIONAL MATERIALS LIST CONTAINS BOOKS, FILMS, FILMSTRIPS AND PAMPHLETS. VOLUME III, INSTRUCTIONAL PLANS FOR THE METAL FORMING AND FABRICATION CLUSTER (VT 004 164) AND VOLUME IV, INSTRUCTIONAL PLAN FOR THE ELECTRO-MECHANICAL INSTALLATION AND REPAIR CLUSTER (VT 004 165) COVER THE OTHER TWO OCCUPATIONAL CLUSTERS DEVELOPED BY THE PROJECT. (MM)

REPORT NUMBER: BR-6-2312

INSTITUTION NAME: MARYLAND UNIV., COLLEGE PARK.

ACCESSION NUMBERS: ED019360 UDC05486

8

PUBLICATION DATE: 67

TITLE: WHAT A HIGHWAY. TEACHER'S GUIDE. CITIZENS ALL SERIES.

PERSONAL AUTHOR: BLACK, MILLARD; MCCLELLAN, JACK

DESCRIPTOR: CONSTRUCTION INDUSTRY; GRADE 6; HIGHWAY ENGINEERING AIDS; INTERMEDIATE GRADES; \*MULTICULTURAL TEXTBOOKS; READING MATERIALS; RESOURCE GUIDES; \*SOCIAL STUDIES; \*TEACHING GUIDES; \*URBAN CULTURE

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

ISSUE: CUMREPT

RECOMMENDED FOR USE IN THE MIDDLE GRADES, PARTICULARLY IN GRADE 6, THIS ILLUSTRATED SOCIAL STUDIES TEXTBOOK OR READING MATERIAL CONTAINS A STORY WHICH CAN PROMOTE BASIC UNDERSTANDING ABOUT URBAN LIVING AND, MORE SPECIFICALLY, CAN STIMULATE AN APPRECIATION FOR HIGHWAY CONSTRUCTION. PEOPLE FROM VARIOUS ETHNIC BACKGROUNDS ARE PRESENTED. GUIDELINES FOR THE TEACHER INCLUDE (1) CHAPTER LESSON PLANS FOR MOTIVATION, READING SKILL DEVELOPMENT, AND INSTRUCTION IN SOCIAL CONCEPTS, (2) ANNOTATIONS ON EACH PAGE, AND (3) A RESOURCE LIST OF SUPPLEMENTARY BOOKS, FILMS, AND FILMSTRIPS. THIS DOCUMENT IS AVAILABLE FROM HOUGHTON MIFFLIN COMPANY, BOSTON, MASSACHUSETTS. (LB)

BUREAU NUMBER: BR-7-0853

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBERS: ED039411 ACC06712

9

PUBLICATION DATE: JUN 69

TITLE: MAINTENANCE RESEARCH. REPORT 6. MAINTENANCE TRAINING.

INSTITUTION CODE: ERB03703

DESCRIPTOR: AUDIOVISUAL INSTRUCTION; EDUCATIONAL NEEDS; GROUP DISCUSSION;  
LECTURE; \*MAINTENANCE; PROGRAM CONTENT; PROGRAMED INSTRUCTION; RESEARCH; \*ROAD  
CONSTRUCTION; \*SUPERVISORY TRAINING; \*TEACHING TECHNIQUES; WORKSHOPS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: R1P.; MAINTENANCE RESEARCH PROJECT 1965-69

ISSUE: RIEQCT70

THE MAIN OBJECTIVE OF THE TRAINING RESEARCH PHASE OF THE MAINTENANCE MANAGEMENT STUDY WAS TO DEVELOP AND TEST TRAINING METHODS SUITABLE FOR HIGHWAY MAINTENANCE SUPERVISORS. SUPERVISORS WERE TRAINED BY ONE OF FIVE DIFFERENT METHODS (LECTURE, GROUP DISCUSSION, PROGRAMED INSTRUCTION, PROGRAMED WORKSHOPS, AUDIOVISUAL INSTRUCTION). THE REPORT DOCUMENTS THE TRAINING PROCEDURE, INCLUDING TRAINING MATERIALS, PROCEDURES, AND TESTS USED. RESULTS ARE ANALYZED AND EVALUATED. THE RESEARCH CONCLUSIONS, AND RECOMMENDATIONS ON DEVELOPING A TOTAL TRAINING PROGRAM FOR MAINTENANCE PERSONNEL, ARE SET FORTH, ALONG WITH THE CURRENT STATUS OF TRAINING IN CONNECTION WITH THE MAINTENANCE MANAGEMENT STUDY. (AUTHOR/LY)

AVAILABILITY: CLEARINGHOUSE FOR FEDERAL SCIENTIFIC AND TECHNICAL INFORMATION, SPRINGFIELD, VA. 22151 (PB-188-295, MF \$0.65, HC \$3.00)

INSTITUTION NAME: LOUISIANA STATE DEPT. OF HIGHWAYS, BATON ROUGE.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH

ACCESSION NUMBERS: EDO22965 VTC7031

10

PROGRAM AREA: 08

PUBLICATION DATE: AUG 68

TITLE: THE IMPLEMENTATION AND FURTHER DEVELOPMENT OF EXPERIMENTAL CLUSTER CONCEPT PROGRAMS THROUGH ACTUAL FIELD TESTING AND EVALUATION AT THE SECONDARY SCHOOL LEVEL. THE CLUSTER CONCEPT PROJECT. PHASE III. INTERIM REPORT.

PERSONAL AUTHOR: MALEY, DONALD; MIETUS, WALTER S.

SPONSORING AGENCY CODE: RMQ66000

DESCRIPTOR: ACHIEVEMENT TESTS; BUILDING TRADES; COGNITIVE ABILITY; COMPARATIVE ANALYSIS; CONTROL GROUPS; \*CURRICULUM DEVELOPMENT; ELECTRICAL OCCUPATIONS; EXPERIMENTAL GROUPS; \*EXPERIMENTAL PROGRAMS; GRADE 11; HIGH SCHOOL STUDENTS; METAL WORKING OCCUPATIONS; \*OCCUPATIONAL CLUSTERS; PILOT PROJECTS; PROGRAM DESCRIPTIONS; \*PROGRAM EVALUATION; QUESTIONNAIRES; \*TRADE AND INDUSTRIAL EDUCATION; VOCATIONAL INTERESTS

IDENTIFIER: CCP; CLUSTER CONCEPT PROGRAM; MARYLAND

EDRS PRICE: EDRS PRICE MF-\$1.75 HC-\$17.60

DESCRIPTIVE NOTE: 438P.

ISSUE: RIEFEB69

THE CLUSTER CONCEPT PROGRAM IN VOCATIONAL EDUCATION, A PROGRAM FOR THE 11TH AND 12TH GRADES, IS DESIGNED TO PREPARE YOUTH FOR ENTRY LEVEL CAPABILITY IN A VARIETY OF RELATED OCCUPATIONS RATHER THAN A SPECIFIC OCCUPATION. PHASE III OF RESEARCH WITH THE PROGRAM WAS THE EVALUATION OF THE FIRST YEAR OF EXPERIMENTATION WITH THE PROGRAMS FOR THE 11TH GRADE. A PRETEST-POST TEST RESEARCH DESIGN WITH FOUR CONTROL AND FOUR EXPERIMENTAL CONSTRUCTION CLUSTER GROUPS, FOUR CONTROL AND THREE EXPERIMENTAL METAL FABRICATION CLUSTER GROUPS, AND THREE CONTROL AND THREE EXPERIMENTAL ELECTROMECHANICAL CLUSTER GROUPS WAS USED TO ESTIMATE THE PROGRAM EFFECTIVENESS. NEWLY DEVELOPED MEASUREMENT INSTRUMENTS AND STANDARDIZED TESTS WERE USED TO ESTIMATE CHANGES IN SELECTED COGNITIVE, AFFECTIVE, AND PSYCHOMOTOR BEHAVIORS. OBJECTIVES WERE ATTAINED IN VARYING DEGREES WITH SIGNIFICANT GAINS IN COGNITIVE ABILITIES IN EIGHT EXPERIMENTAL GROUPS AND MODEST GAINS IN TWO GROUPS. INCREASED FLEXIBILITY OF OCCUPATIONAL PREFERENCES AND BROADENED INTERESTS WERE FOUND IN THE EXPERIMENTAL GROUPS. INADEQUACIES IDENTIFIED FROM THE EVALUATION WILL SERVE TO ESTABLISH A LIST OF REALISTIC RECOMMENDATIONS FOR THE FURTHER DEVELOPMENT OF THE PROGRAMS. THE APPENDICES CONTAIN MEASUREMENT INSTRUMENTS AND ACHIEVEMENT TESTS USED IN PROGRAM EVALUATION. RELATED DOCUMENTS ARE VT 002 356, VT 002 254, AND VT 004 162-VT 004 165. (HC)

GRANT NUMBER: DEG-0-8-060853-1865(085)

ACCESSION NUMBERS: ED027477 AC003966

PUBLICATION DATE: 68

TITLE: TRAINING GUIDE: CONSTRUCTION.

INSTITUTION CODE: FEB01486

DESCRIPTOR: APPRENTICESHIPS; CERTIFICATION; \*CONSTRUCTION INDUSTRY; DIRECTORIES; FILMS; FILMSTRIPS; FINANCIAL SUPPORT; \*GUIDES; \*INDUSTRIAL TRAINING; ORGANIZATIONS (GROUPS); PERIODICALS; PROGRAM ADMINISTRATION; PROGRAMED INSTRUCTION; QUALIFICATIONS; TECHNICAL EDUCATION; TEXTBOOKS; \*VOCATIONAL EDUCATION.

IDENTIFIER: \*GREAT BRITAIN

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 94P.

ISSUE: RIFAU969

THIS BRITISH GUIDE IS DESIGNED FOR TRAINING OFFICERS, EMPLOYERS, TEACHERS, LECTURERS IN ARCHITECTURE AND RELATED PROFESSIONAL SUBJECTS, AND OTHERS CONCERNED WITH TRAINING AND EDUCATION IN THE CONSTRUCTION INDUSTRY. CHAPTER TOPICS ARE: (1) THE TRAINING PICTURE (LARGELY DEALING WITH PROGRAM PLANNING AND FINANCIAL POLICY UNDER THE CONSTRUCTION INDUSTRY TRAINING BOARD); (2) MEMBERS, FACILITIES, COMMITTEES, TRAINING GRANTS, AND OTHER FEATURES OF THE BOARD; (3) APPRENTICESHIPS AND OTHER TRAINING SCHEMES; (4) PROFESSIONAL AND QUALIFYING BODIES; (5) QUALIFICATIONS AND EXAMINATIONS; (6) NONQUALIFYING BODIES; (7) TRAINING MATERIALS (PUBLISHERS, BOOKS, PERIODICALS AND JOURNALS, PROGRAMED INSTRUCTION, AND FILMS AND FILMSTRIPS). A GENERAL INDEX IS INCLUDED. (LY)

AVAILABILITY: INTERNATIONAL TEXTBOOK COMPANY, LTD., INTERTEXT HOUSE, PARKGATE RD., LONDON S. W.11, ENGLAND (18S).

INSTITUTION NAME: KOGAN PAGE, LTD., LONDON (ENGLAND).

ACCESSION NUMBERS: EDO28266 VT007959

PUBLICATION DATE: 68

TITLE: GUIDES IN CONSTRUCTION AND MANUFACTURING FOR ELEMENTARY SCHOOL INDUSTRIAL ARTS. K-2; 3-4; 5-6.

INSTITUTION CODE: RUF67125

DESCRIPTOR: \*CONSTRUCTION (PROCESS); \*CURRICULUM GUIDES; \*ELEMENTARY GRADES; \*INDUSTRIAL ARTS; KINDERGARTEN; LESSON PLANS; \*MANUFACTURING

IDENTIFIER: \*NATIONAL DEFENSE EDUCATION ACT TITLE XI. INSTITUTE; NDEA TITLE XI INSTITUTE

EDRS PRICE: EDRS PRICE MF-\$1.00 HC-\$12.50

DESCRIPTIVE NOTE: 254P.; MATERIALS DEVELOPED AT NDEA INST. FOR ADVANCED STUDY IN ELEMENTARY INDUSTRIAL ARTS (COLUMBUS, SUMMER 1968)

ISSUE: RIEAUG69

THIS SERIES OF THREE GUIDES WAS DEVELOPED BY 25 PARTICIPANTS IN THE INSTITUTE. ONE HUNDRED AND EIGHT INDUSTRIAL ARTS LESSON PLANS FOR GRADES K-6 ARE INCLUDED IN THESE GUIDES FOR CONSTRUCTION AND FOR MANUFACTURING INTENDED TO REFLECT THE CONTEMPORARY INDUSTRIAL AND TECHNOLOGICAL SOCIETY IN WHICH YOUNG CHILDREN LIVE. SOME TYPICAL CONSTRUCTION LESSONS ARE: (1) MAN AND TECHNOLOGY, (2) SELECTING A SITE, (3) LISTING MATERIALS, (4) CLEARING THE SITE AND GETTING READY TO BUILD, (5) ERECTING STEEL FRAMES, (6) MEDIATION, ARBITRATION, AND STRIKING, AND (7) MAINTAINING PROPERTY. SOME TYPICAL MANUFACTURING LESSONS ARE (1) MANUFACTURING AND THE ECONOMIC SYSTEM, (2) IDENTIFYING CONSUMER DEMAND, (3) DESIGNING POWER ELEMENTS, (4) OPERATING QUALITY CONTROL SYSTEMS, (5) ESTABLISHING ACCIDENT PREVENTION PROGRAMS, (6) HOT AND COLD WORKING PROCESSES, AND (7) SERVICING MANUFACTURED PRODUCTS. EACH LESSON INCLUDES OBJECTIVES, ACTIVITIES, TEACHING PROCEDURE, RELATIONSHIPS TO OTHER SUBJECTS, MATERIALS REQUIRED, AND A BIBLIOGRAPHY. (EM)

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS.

ACCESSION NUMBERS: EDC81620 ACCC4649

13

PUBLICATION DATE: DEC 67

TITLE: THE CORNELL UNIVERSITY PROGRAM OF IN-SERVICE EDUCATION FOR CONSTRUCTION ENGINEERS: AN EVALUATION REPORT.

PERSONAL AUTHOR: BAIL, FREDERICK T.; AND OTHERS

INSTITUTION CODE: DRB02245

DESCRIPTOR: ACADEMIC PERFORMANCE; COLLEGE FACULTY; \*CONSTRUCTION INDUSTRY;  
COURSE OBJECTIVES; EMPLOYER ATTITUDES; \*ENGINEERS; GROUP DISCUSSION; GROUP  
STRUCTURE; INSTRUCTIONAL IMPROVEMENT; PARTICIPANT SATISFACTION; \*PROFESSIONAL  
CONTINUING EDUCATION; \*PROGRAM EVALUATION; QUESTIONNAIRES; TRANSFER OF TRAINING

EDRS PRICE: EDRS PRICE MF-\$0.25 HC-\$1.90

DESCRIPTIVE NOTE: 36P.

ISSUE: RIEJAN70

EFFECTIVENESS OF THE CORNELL UNIVERSITY TWO WEEK PROGRAM FOR POST-GRADUATE,  
INSERVICE TRAINING OF ENGINEERS IN THE CONSTRUCTION INDUSTRY IS EVALUATED. AN  
INTERVIEW FORM WAS ADMINISTERED TO PROGRAM ORIGINATORS, PARTICIPANTS, FACULTY,  
AND EMPLOYERS OF THE PARTICIPANTS, FOLLOWING THE FIRST OF THREE ANNUAL SESSIONS,  
HELD IN 1967. THE PROGRAM RECEIVED GENERAL ACCEPTANCE BY ALL INVOLVED, BUT  
PARTICIPANTS FELT THAT THE IMMEDIATE GOAL OF UPDATING PRACTICE IN THE  
CONSTRUCTION INDUSTRY NEEDED TO BE CLARIFIED. IT WAS FELT THAT THE GROUP WAS TOO  
HETEROGENEOUS IN ENGINEERING SPECIALITIES, INTELLECTUAL KNOWLEDGE, AND JOB  
POSITION, EFFECTIVELY TO ACCOMPLISH PROGRAM OBJECTIVES. LITTLE EVIDENCE OF  
APPLICATION OF KNOWLEDGE TO ON THE JOB SITUATIONS WAS FOUND. IT WAS RECOMMENDED  
THAT: LEARNING ACHIEVEMENT IN THE CAMPUS SESSION BE ASSESSED; FACULTY MEMBERS  
CLARIFY GOALS OF THEIR PARTICULAR COURSES; THE CONCEPT OF HOME STUDY BE REVISED;  
ON CAMPUS SESSIONS BE HELD TO DISCUSS FIELD PROBLEMS; USE OF DIFFERENT  
INSTRUCTIONAL TECHNIQUES BE EXPLORED; AND INFORMAL GROUP DISCUSSIONS BE USED  
DURING EVENING SESSIONS. (APPENDICES INCLUDE THE INTERVIEW FORMS, AND A LISTING  
OF PARTICIPATING ENGINEERS, FACULTY, AND EMPLOYERS.) (PT)

INSTITUTION NAME: CORNELL UNIV., ITHACA, N.Y. COLL. OF ENGINEERING.

ACCESSION NUMBERS: ED034021 VTCCE907

14

PUBLICATION DATE: 68

TITLE: TRAINING GUIDE: CONSTRUCTION.

INSTITUTION CODE: PRBC1480

DESCRIPTOR: \*CONSTRUCTION INDUSTRY; \*DIRECTORIES; \*EDUCATIONAL NEEDS;  
EDUCATIONAL OPPORTUNITIES; FOREIGN COUNTRIES; \*LEADERS GUIDES; TRAINING

IDENTIFIER: ENGLAND

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 64P.

ISSUE: RIEMAR70

THE BRITISH CONSTRUCTION INDUSTRY HAS ONE OF THE BEST-RUN TRAINING BOARDS IN THAT COUNTRY, ENCOMPASSING 70,000 ESTABLISHMENTS AND MAINTAINING WORKING RELATIONSHIPS WITH SOME 200 ASSOCIATIONS, FEDERATIONS AND TRADE UNIONS. THIS GUIDE, PREPARED FOR ALL THOSE CONCERNED WITH TRAINING AND EDUCATION IN THE CONSTRUCTION INDUSTRY, CONTAINS (1) THE TRAINING PICTURE, AN INTRODUCTION, (2) THE CONSTRUCTION INDUSTRY TRAINING BOARD, ITS MEMBERS, SCOPE, FINANCES, AND PUBLICATIONS, (3) APPRENTICESHIP AND OTHER TRAINING SCHEMES, (4) QUALIFICATIONS AND EXAMINATIONS, (5) PROFESSIONAL AND QUALIFYING BODIES, A LISTING AND BRIEF NOTE ABOUT EACH, (6) NON-QUALIFYING BODIES, AND (7) TRAINING MATERIALS, TITLES, AND ADDRESSES OF PUBLISHERS. (GR)

AVAILABILITY: INTERNATIONAL TEXTBOOK COMPANY, LTD., PARKGATE ROAD, LONDON, S.W. 11, ENGLAND

INSTITUTION NAME: KOGAN PAGE, LTD., LONDON (ENGLAND).

ACCESSION NUMBERS: FOC39216 EFO3686

15

PUBLICATION DATE: JAN 69

TITLE: UNIVERSITY RESIDENTIAL BUILDINGS SYSTEM. URBS COMPONENTS PRELIMINARY DESIGN MANUAL.

INSTITUTION CODE: RE02215

DESCRIPTOR: \*BUILDING DESIGN; BUILDING EQUIPMENT; BUILDING MATERIALS; \*COLLEGE HOUSING; \*COMPONENT BUILDING SYSTEMS; CONSTRUCTION INDUSTRY; FLEXIBLE FACILITIES; \*GUIDELINES; MANUALS; \*PERFORMANCE SPECIFICATIONS; PREFABRICATION; STRUCTURAL BUILDING SYSTEMS; SYSTEMS APPROACH

EDRS PRICE: EDPS PRICE MF-\$0.25 HC-\$2.05

DESCRIPTIVE NOTE: 39P.

ISSUE: RIEMAY70

BASIC INFORMATION AND GUIDELINES ON THE USE OF URBS COMPONENTS ARE PROVIDED FOR USE BY ARCHITECTS AND ENGINEERS. THE URBS SYSTEM WAS DEVELOPED IN RESPONSE TO THE COMPETITIVE BIDDING ON PERFORMANCE SPECIFICATIONS, INCORPORATING USER REQUIREMENTS, ECONOMIC CONSTRAINTS, INDUSTRY CAPABILITY AND TRADE PRACTICES. THE ESSENCE OF THE URBS PROJECT--THE SYSTEMS APPROACH--REQUIRES THAT COMPONENTS AND MATERIALS BE COORDINATED AT THEIR DESIGN STAGE SO THAT THE USER REQUIREMENTS, PRODUCTION, SITE INSTALLATION, MAINTENANCE, APPEARANCE, AND COST CAN BE CONSIDERED SIMULTANEOUSLY. THERE ARE FIVE COMPONENTS IN THE PROGRAM--(1) STRUCTURE-CEILING, (2) HEATING-VENTILATING-COOLING, (3) PARTITIONS, (4) BATHROOMS, AND (5) FURNISHINGS. (TC)

INSTITUTION NAME: CALIFORNIA UNIV., BERKELEY. DEPT. OF PHYSICAL PLANNING AND CONSTRUCTION.

ACCESSION NUMBERS: F0035219 FF003756

16

PUBLICATION DATE: MAY 69

TITLE: RESEARCH STUDY OF MODULAR DESIGN OF SCHOOL BUILDINGS IN EUROPE. APRIL 20, 1968 - MAY 20, 1968. REVISED 1969.

PERSONAL AUTHOR: ORLOWSKI, S. T.

INSTITUTION CODE: RRR01978

DESCRIPTOR: BUILDING MATERIALS; BUILDING TRADES; \*COMPONENT BUILDING SYSTEMS; CONSTRUCTION COSTS; \*CONSTRUCTION INDUSTRY; \*MODULAR BUILDING DESIGN; \*PREFABRICATION; RESEARCH; \*SCHOOL DESIGN; TEACHING METHODS

EDRS PRICE: EDRS PRICE MF-\$0.50 HC-\$3.55

DESCRIPTIVE NOTE: 69P.

ISSUE: RIFMAY70

RESEARCH FOR THIS COMPARATIVE STUDY CONSISTED OF SCHOOL VISITS AND DISCUSSIONS ON THE SCHOOL BUILDING INDUSTRY WITH LEADING MEN IN THE FIELD IN ENGLAND, WEST GERMANY, SWITZERLAND, AND ITALY. THE STUDY EXPLORER THE USE OF PREFABRICATION AND MODULAR SCHOOL DESIGN, WHICH PROVIDE ECONOMICAL AND FLEXIBLE SCHOOL BUILDINGS TO ACCOMMODATE AN INCREASING SCHOOL POPULATION AND CHANGING METHODS OF INSTRUCTION BROUGHT ABOUT BY THE USE OF AUDIO-VISUAL AIDS AND A NEW TEACHING PHILOSOPHY. (TC)

INSTITUTION NAME: ONTARIO DEPT. OF EDUCATION, TORONTO. SCHOOL PLANNING AND BUILDING RESEARCH SECTION.

ACCESSION NUMBERS: ED035747 VT010139

17

PROGRAM AREA: OE

PUBLICATION DATE: 69

TITLE: LABORATORY MANUAL (FOR CONCRETE INSTRUCTION COURSE); INSTRUCTOR'S GUIDE, PILOT PROGRAM EDITION.

INSTITUTION CODE: BEB02862

SPONSORING AGENCY CODE: RMQ66004

DESCRIPTOR: \*CEMENT INDUSTRY; EDUCATIONAL PROGRAMS; INSTRUCTIONAL MATERIALS; INSTRUCTIONAL PROGRAMS; \*PILOT PROJECTS; POST SECONDARY EDUCATION; TEACHING GUIDES; \*TECHNICAL EDUCATION; \*TRADE AND INDUSTRIAL EDUCATION

IDENTIFIER: PORTLAND CEMENT ASSOCIATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 641P.

ISSUE: RIEMAY70

THIS LABORATORY MANUAL, PREPARED FOR A 2-YEAR PROGRAM IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES, IS DESIGNED TO ACCOMPANY THE INSTRUCTIONAL MATERIALS TO TRAIN PERSONS FOR EMPLOYMENT AS TECHNICIANS IN THE CEMENT AND CONCRETE INDUSTRIES. INCLUDED ARE 16 LABORATORY ASSIGNMENTS FOR EACH OF THE FOLLOWING: (1) PRINCIPLES OF CONCRETE, (2) CONCRETE IN THE FIELD-I, (3) CONCRETE IN THE FIELD-II, AND SPECIAL CONCRETES AND FIELD PROBLEMS. ASTM STANDARDS RELATED TO THE USE OF CEMENT AND CONCRETE, AND LABORATORY EQUIPMENT LISTS ARE APPENDED. THIS MANUAL AND RELATED MATERIALS ARE CURRENTLY BEING FIELD TESTED PRIOR TO REVISION AND SHOULD BE AVAILABLE IN REVISED FORM BY LATE 1972. RELATED DOCUMENTS ARE AVAILABLE AS VT 010 140-VT 010 141 AND VT 010 150-VT 010 152. (CR)

GRANT NUMBER: OEG-O-8-080042-3667(085)

BUREAU NUMBER: BR-E-0042

AVAILABILITY: PORTLAND CEMENT ASSOCIATION, 601 ROCKWELL AVENUE, CLEVELAND, OHIO 44114

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, CLEVELAND, OHIO.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH

ACCESSION NUMBERS: E0035748 VTC1614C

18

PROGRAM AREA: 98

PUBLICATION DATE: 69

TITLE: CONCRETE IN THE FIELD-I; INSTRUCTOR'S GUIDE; PILOT PROGRAM EDITION

INSTITUTION CODE: B6802862

SPONSORING AGENCY CODE: RMQ66004

DESCRIPTOR: \*CEMENT INDUSTRY; EDUCATIONAL PROGRAMS; INSTRUCTIONAL MATERIALS;  
\*PILOT PROJECTS; POST SECONDARY EDUCATION; \*TEACHING GUIDES; \*TECHNICAL  
EDUCATION; \*TRADE AND INDUSTRIAL EDUCATION

IDENTIFIER: PORTLAND CEMENT ASSOCIATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: \$57P.

ISSUE: RIENAY70

THIS GUIDE, PREPARED FOR A 2-YEAR COURSE IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES, IS DESIGNED TO BE A NATIONAL PROGRAM TO TRAIN PERSONS FOR EMPLOYMENT AS TECHNICIANS IN THE CEMENT AND CONCRETE INDUSTRIES. INCLUDED ARE 48 SESSION OUTLINES DIVIDED INTO FIVE UNITS OF STUDY. EACH UNIT CONTAINS OBJECTIVES, OUTLINES, RELATED INFORMATION, AND ILLUSTRATIONS. UNIT 5 INCLUDES INTRODUCTION, AND HANDLING OF CONCRETE-TRANSPORTING AND CONCRETE-PLACING. UNIT 6 INCLUDES TOOLS AND EQUIPMENT FOR FINISHING CONCRETE, FINISHING OF CONCRETE, AND REVIEW AND MID-TERM EXAM (NOT SUPPLIED). UNIT 7 INCLUDES JOINTING OF CONCRETE AND VOLUME CHANGES AND CRACK CONTROL. UNIT 8 INCLUDES SOIL-CEMENT. UNIT 9 INCLUDES FIRE RESISTANCE OF CONCRETE AND REVIEW AND FINAL EXAM (NOT SUPPLIED). EACH SESSION INCLUDES GENERAL OBJECTIVES, PERFORMANCE OBJECTIVES, INTRODUCTION, OVERVIEW OF SESSION, SESSION OUTLINE, RELATED ACTIVITIES, TOOLS AND MATERIALS, PRESENTATION OUTLINE, TEACHING TECHNIQUES, AIDS AND DEVICES, RELATED INFORMATION, AND DISCUSSION QUESTIONS. A GLOSSARY IS APPENDED. THIS GUIDE AND RELATED DOCUMENTS (VT 010 139 AND VT 010 141 AND VT 010 150-VT 010 152) ARE CURRENTLY BEING FIELD TESTED PRIOR TO REVISION AND SHOULD BE AVAILABLE IN REVISED FORM BY LATE 1972. (GR)

GRANT NUMBER: OEG-C-8-C80042-3667(085)

BUREAU NUMBER: BR-8-C042

AVAILABILITY: PORTLAND CEMENT ASSOCIATION, 601 ROCKWELL AVENUE, CLEVELAND, OHIO 44114

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, CLEVELAND, OHIO.

RESEARCH

ACCESSION NUMBERS: E0025749 VTG10141

19

PROGRAM AREA: 08

PUBLICATION DATE: 69

TITLE: CONCRETE IN THE FIELD-II; INSTRUCTOR'S GUIDE; PILOT PROGRAM EDITION.

INSTITUTION CODE: EER02862

SPONSORING AGENCY CODE: RMG66004

DESCRIPTOR: \*CEMENT INDUSTRY; EDUCATIONAL PROGRAMS; INSTRUCTIONAL MATERIALS; \*PILOT PROJECTS; POST SECONDARY EDUCATION; \*TEACHING GUIDES; \*TECHNICAL EDUCATION; \*TRADE AND INDUSTRIAL EDUCATION

IDENTIFIER: PORTLAND CEMENT ASSOCIATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 681P.

ISSUE: RIEMAY70

THIS GUIDE, PREPARED FOR A 2-YEAR COURSE IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES, IS DESIGNED TO BE A NATIONAL PROGRAM TO TRAIN PERSONS FOR EMPLOYMENT AS TECHNICIANS IN THE CEMENT AND CONCRETE INDUSTRIES. INCLUDED ARE 48 SESSION OUTLINES DIVIDED INTO SIX UNITS OF STUDY. EACH UNIT CONTAINS OBJECTIVES, OUTLINE, RELATED INFORMATION, AND ILLUSTRATIONS. UNIT 10 INCLUDES INTRODUCTION AND CURING OF CONCRETE. UNIT 11 INCLUDES HOT- AND COLD-WEATHER CONCRETING. UNIT 12 INCLUDES FORMS FOR CONCRETE AND REVIEW AND MID-TERM EXAM (NOT SUPPLIED). UNIT 13 COVERS REQUIREMENTS FOR REINFORCED CONCRETE. UNIT 14 INCLUDES PRESTRESSED AND PRECAST CONCRETE. UNIT 15 INCLUDES ESTIMATING AND REVIEW AND FINAL EXAM (NOT SUPPLIED). EACH SESSION INCLUDES THE GENERAL OBJECTIVES, PERFORMANCE OBJECTIVES, INTRODUCTION, OVERVIEW OF SESSION, SESSION OUTLINE, RELATED ACTIVITIES, TOOLS AND MATERIALS, PRESENTATION OUTLINE, TEACHING TECHNIQUES, AIDS AND DEVICES, RELATED INFORMATION, AND DISCUSSION QUESTIONS. A GLOSSARY IS APPENDED. THIS GUIDE AND RELATED DOCUMENTS (VT G10 139 AND VT G10 140 AND VT G10 150-VT G10 152) ARE CURRENTLY BEING FIELD TESTED PRIOR TO REVISION AND SHOULD BE AVAILABLE IN REVISED FORM BY LATE 1972. (GR)

GRANT NUMBER: OEG-0-8-080C42-3667(085)

BUREAU NUMBER: ER-8-0042

AVAILABILITY: PORTLAND CEMENT ASSOCIATION, 601 ROCKWELL AVENUE, CLEVELAND, OHIO 44114

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, CLEVELAND, OHIO.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH.

ACCESSION NUMBERS: EDC35751 VT01015C

20

PROGRAM AREA: 08

PUBLICATION DATE: 69

TITLE: PRINCIPLES OF CONCRETE, INSTRUCTOR'S MANUAL; PILOT PROGRAM EDITION.

INSTITUTION CODE: BB502862

SPONSORING AGENCY CODE: RM066004

DESCRIPTOR: \*CEMENT INDUSTRY; EDUCATIONAL PROGRAMS; INSTRUCTIONAL MATERIALS;  
\*PILOT PROJECTS; POST SECONDARY EDUCATION; \*TEACHING GUIDES; \*TECHNICAL  
EDUCATION; \*TRADE AND INDUSTRIAL EDUCATION

IDENTIFIER: PORTLAND CEMENT ASSOCIATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 630P.

ISSUE: RIEMAY70

THIS GUIDE, PREPARED FOR A 2-YEAR COURSE IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES, IS DESIGNED TO BE A NATIONAL PROGRAM TO TRAIN PERSONS FOR EMPLOYMENT AS TECHNICIANS IN THE CEMENT AND CONCRETE INDUSTRIES. INCLUDED ARE 48 SESSION OUTLINES DIVIDED INTO FOUR UNITS OF STUDY. EACH UNIT CONTAINS OBJECTIVES, OUTLINE, RELATED INFORMATION, AND ILLUSTRATIONS. UNIT 1 INCLUDES INTRODUCTION, JOB OPPORTUNITIES, HISTORY OF CEMENT AND CONCRETE INDUSTRIES, AND USES OF CONCRETE AND CONCRETE PRODUCTS. UNIT 2 INCLUDES MATERIALS FOR CONCRETE-CEMENT, WATER, AND AGGREGATES, AIR-ENTRAINED CONCRETE, REVIEW AND MID-TERM EXAM (NOT SUPPLIED), AND MATERIALS FOR CONCRETE-ADMIXTURES. UNIT 3 COVERS ESSENTIALS OF CONCRETE. UNIT 4 INCLUDES DESIGN OF CONCRETE MIXTURES, BATCHING AND MIXING CONCRETE, AND REVIEW AND FINAL EXAM (NOT SUPPLIED). EACH SESSION INCLUDES THE GENERAL OBJECTIVES, PERFORMANCE OBJECTIVES, INTRODUCTION, OVERVIEW OF THE SESSION, SESSION OUTLINE, RELATED ACTIVITIES, TOOLS AND MATERIALS, PRESENTATION OUTLINE, TEACHING TECHNIQUES, AIDS AND DEVICES, RELATED INFORMATION, AND DISCUSSION QUESTIONS. THIS GUIDE AND RELATED DOCUMENTS (VT 010 139-VT 010 141 AND VT 010 151-VT 010 152) ARE CURRENTLY BEING FIELD TESTED PRIOR TO REVISION AND SHOULD BE AVAILABLE IN REVISED FORM BY LATE 1972. (GR)

GRANT NUMBER: DEG-0-8-CED0042-3667(085)

BUREAU NUMBER: BR-8-0042

AVAILABILITY: PORTLAND CEMENT ASSOCIATION, 601 ROCKWELL AVENUE, CLEVELAND, OHIO 44114

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, CLEVELAND, OHIO.

ACCESSION NUMBERS: ED035752 VTC10151

PROGRAM AREA: 08

PUBLICATION DATE: 69

TITLE: QUALITY ASSURANCE; INSTRUCTOR'S GUIDE; PILOT PROGRAM EDITION.

INSTITUTION CODE: PBB02862

SPONSORING AGENCY CODE: RMQ66004

DESCRIPTOR: \*CEMENT INDUSTRY; EDUCATIONAL PROGRAMS; INSTRUCTIONAL MATERIALS;  
\*PILOT PROJECTS; POST SECONDARY EDUCATION; \*TEACHING GUIDES; \*TECHNICAL  
EDUCATION; \*TRADE AND INDUSTRIAL EDUCATION

IDENTIFIER: PORTLAND CEMENT ASSOCIATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 260P.

ISSUE: RIEMAY70

THIS GUIDE, PREPARED FOR A 2-YEAR PROGRAM IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES, IS DESIGNED TO TRAIN PERSONS FOR EMPLOYMENT AS TECHNICIANS IN THE CEMENT AND CONCRETE INDUSTRIES. INCLUDED ARE 32 SESSION OUTLINES DIVIDED INTO SEVEN UNITS OF STUDY. EACH UNIT CONTAINS OBJECTIVES, A SUBJECT OUTLINE, RELATED INFORMATION, AND ILLUSTRATIONS. UNIT 20 CONTAINS INTRODUCTION AND SCOPE OF QUALITY ASSURANCE. UNIT 21 CONTAINS STANDARDS, SPECIFICATIONS AND TEST METHODS. UNIT 22 CONTAINS COLLECTION AND PREPARATION OF DATA, AND STATISTICAL ANALYSIS OF DATA. UNIT 23 CONTAINS INSPECTION AND TESTING OF MATERIALS AND REVIEW AND MID-TERM EXAM (NOT SUPPLIED). UNIT 24 CONTAINS JOB-SITE AND BEFORE CONCRETING INSPECTION. UNIT 25 CONTAINS INSPECTION DURING CONCRETING-PLASTIC CONCRETE. UNIT 26 CONTAINS INSPECTION AFTER CONCRETING-HARDENED CONCRETE, AND REVIEW AND FINAL EXAM (NOT SUPPLIED). A GLOSSARY IS APPENDED. THIS GUIDE AND RELATED MATERIALS (VT 010 139-VT 010 141 AND VT 010 150-VT 010 152) ARE CURRENTLY BEING FIELD TESTED PRIOR TO REVISION AND SHOULD BE AVAILABLE IN REVISED FORM BY LATE 1972. (GR)

GRANT NUMBER: DEG-0-8-080042-3667(085)

BUREAU NUMBER: BR-8-0042

AVAILABILITY: PORTLAND CEMENT ASSOCIATION, 601 ROCKWELL AVENUE, CLEVELAND, OHIO 44114

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, CLEVELAND, OHIO.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHED), WASHINGTON, D.C. BUREAU OF RESEARCH.

ACCESSION NUMBERS: EDO35753 VT010152

22

PROGRAM AREA: 08

PUBLICATION DATE: 69

TITLE: SPECIAL CONCRETES AND FIELD PROBLEMS; INSTRUCTOR'S GUIDE; PILOT PROGRAM EDITION.

INSTITUTION CODE: B8B02862

SPONSORING AGENCY CODE: RMC66004

DESCRIPTOR: \*CEMENT INDUSTRY; EDUCATIONAL PROGRAMS; INSTRUCTIONAL MATERIALS; \*PILOT PROJECTS; POST SECONDARY EDUCATION; \*TEACHING GUIDES; \*TECHNICAL EDUCATION; \*TRADE AND INDUSTRIAL EDUCATION

IDENTIFIER: PORTLAND CEMENT ASSOCIATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 650P.

ISSUE: RIEMAY70

THIS GUIDE, PREPARED FOR A 2-YEAR PROGRAM IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES, IS DESIGNED FOR A NATIONAL PROGRAM TO TRAIN PERSONS FOR EMPLOYMENT AS TECHNICIANS IN THE CEMENT AND CONCRETE INDUSTRIES. INCLUDED ARE 48 SESSION OUTLINES DIVIDED INTO FOUR UNITS OF STUDY. EACH UNIT CONTAINS SESSION OBJECTIVES AND OUTLINES, PRESENTATION OUTLINES, RELATED INFORMATION, AND ILLUSTRATIONS. UNIT 16 CONTAINS INTRODUCTION, THE LIGHTWEIGHT CONCRETE SPECTRUM, INSULATING CONCRETES, STRUCTURAL LIGHTWEIGHT CONCRETE, HEAVYWEIGHT CONCRETE, AND DECORATIVE CONCRETE. UNIT 17 CONTAINS NON-PLASTIC MIXES, CONCRETE MASONRY-MANUFACTURE, CONCRETE MASONRY-CONSTRUCTION AND MORTARS, REVIEW AND MIDTERM EXAM (NOT SUPPLIED), CONCRETE PIPE-MANUFACTURE, AND CONCRETE PIPE-CONSTRUCTION. UNIT 18 CONTAINS ANALYZING CONCRETE FIELD PROBLEMS. UNIT 19 CONTAINS LEGAL ASPECTS OF CONCRETE CONSTRUCTION, AND REVIEW AND FINAL EXAM (NOT SUPPLIED). A GLOSSARY IS APPENDED. THIS GUIDE AND RELATED MATERIALS (VT 010 139-VT 010 141 AND VT 010 150-VT 010 151) ARE CURRENTLY BEING FIELD TESTED PRIOR TO REVISION AND SHOULD BE AVAILABLE IN REVISED FORM BY LATE 1972. (GR)

GRANT NUMBER: OEG-C-8-080042-3667(085)

BUREAU NUMBER: BR-8-0042

AVAILABILITY: PORTLAND CEMENT ASSOCIATION, 601 ROCKWELL AVENUE, CLEVELAND, OHIO 44114

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, CLEVELAND, OHIO.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF

ACCESSION NUMBERS: ED037572 VT010677

23

PROGRAM AREA: 24

PUBLICATION DATE: 30 NOV 69

TITLE: RESULTS OF PHASE I OF THE DEVELOPMENT OF COURSE CONTENT AND TEACHING GUIDES FOR A TOTAL CURRICULUM IN CONCRETE TECHNOLOGY. INTERIM REPORT.

PERSONAL AUTHOR: PIPER, JAMES D.; AND OTHERS

INSTITUTION CODE: J1M73480

SPONSORING AGENCY CODE: RMQ66004

DESCRIPTOR: \*CEMENT INDUSTRY; COURSE CONTENT; \*CURRICULUM DEVELOPMENT; CURRICULUM GUIDES; POST SECONDARY EDUCATION; \*TEACHING GUIDES; \*TECHNICAL REPORTS; \*TRADE AND INDUSTRIAL EDUCATION; VOCATIONAL EDUCATION

IDENTIFIER: \*PORTLAND CEMENT ASSOCIATION

EDRS PRICE: EDRS PRICE MF-\$0.50 HC-\$5.35

DESCRIPTIVE NOTE: 105P.

ISSUE: RIEJUL70

IN THIS FIRST PHASE, JOB DESCRIPTIONS AND NEED FOR TRAINED CONCRETE TECHNOLOGISTS WITHIN THE CONCRETE-USING INDUSTRIES WERE DETERMINED BY SURVEY. THE PROJECT STAFF CREATED CURRICULUM MATERIALS WHICH WERE REVIEWED BY OUTSIDE AUTHORITIES AND PUT INTO WORKABLE LESSON PLANS BY A GROUP OF EDUCATIONAL CONSULTANTS. THE RESULT WAS A SIX-VOLUME SET OF INSTRUCTIONAL MATERIALS COVERING 496 STUDENT-CONTACT HOURS OR 21 CREDIT HOURS WHICH COULD BE USED TO IMPLEMENT 2-YEAR CONCRETE TECHNOLOGY COURSES IN POST-SECONDARY SCHOOLS THROUGHOUT THE NATION. PILOT PROGRAMS WERE ESTABLISHED IN SIX JUNIOR COLLEGES IN THE U.S. AND CANADA TO TEST COURSE CONTENT. RECOMMENDATIONS WERE FOR CONTINUED TESTING AND EVENTUAL FINALIZING OF THE CURRICULUM IN PHASE II, THE ADAPTATION OF THE CURRICULUM TO OTHER EDUCATIONAL ENDEAVORS IN PHASE III, AND THE CREATION OF RECRUITING MATERIALS. THE CURRICULUM MATERIALS ARE AVAILABLE AS VT 010 139-VT 010 141 AND VT 010 150-VT 010 152. OUTLINES OF THESE COURSES MAKE UP THE BULK OF THIS MANUSCRIPT. (CD)

GRANT NUMBER: DEG-0-8-080042-3667(085)

BUREAU NUMBER: BR-8-C042

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, CHICAGO, ILL.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH.

ACCESSION NUMBERS: EDO38271 SE007847

24

PUBLICATION DATE: 66

TITLE: POLYHEDRON MODELS FOR THE CLASSROOM.

PERSONAL AUTHOR: WENNINGER, MAGNUS J.

INSTITUTION CODE: FGK56560

DESCRIPTOR: \*CONSTRUCTION (PROCESS); \*GEOMETRIC CONCEPTS; \*GEOMETRY;  
\*INSTRUCTIONAL MATERIALS; MATHEMATICAL ENRICHMENT; MATHEMATICAL MODELS;  
MATHEMATICS MATERIALS

IDENTIFIER: NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

EDRS PRICE: EDRS PRICE MF-\$0.25 HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 47P.

ISSUE: RIEAUG70

THIS BOOKLET EXPLAINS THE HISTORICAL BACKGROUND AND CONSTRUCTION TECHNIQUES FOR VARIOUS SETS OF UNIFORM POLYHEDRA. THE AUTHOR INDICATES THAT THE PRACTICAL SIGNIFICANCE OF THE CONSTRUCTIONS ARISES IN ILLUSTRATIONS FOR THE IDEAS OF SYMMETRY, REFLECTION, ROTATION, TRANSLATION, GROUP THEORY AND TOPOLOGY. DETAILS FOR CONSTRUCTING HOLLOW PAPER MODELS ARE PROVIDED FOR THE FIVE PLATONIC SOLIDS, MISCELLANEOUS IRREGULAR POLYHEDRA AND SOME COMPOUNDS ARISING FROM THE STELLATION PROCESS. (RS)

AVAILABILITY: NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS, 1201 16TH ST., N.W.,  
WASHINGTON, D.C. 20036

INSTITUTION NAME: NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS, INC.,  
WASHINGTON, D.C.

ACCESSION NUMBERS: ED038528 VTC10769

25

PUBLICATION DATE: 69

TITLE: ARCHITECTURAL AND BUILDING CONSTRUCTION TECHNOLOGY; A SUGGESTED 2-YEAR POST HIGH SCHOOL CURRICULUM. TECHNICAL EDUCATION PROGRAM SERIES NO. 9.

INSTITUTION CODE: RM06600C

DESCRIPTOR: \*ARCHITECTURAL EDUCATION; BIBLIOGRAPHIES; \*CONSTRUCTION PROGRAMS; \*CURRICULUM GUIDES; CRAFTSMEN; FACILITY GUIDELINES; \*POST SECONDARY EDUCATION; \*PROGRAM GUIDES; SUBPROFESSIONALS; TECHNICAL EDUCATION

EDRS PRICE: EDRS PRICE MF-\$0.50 HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 117P.

ISSUE: RIEAUG70

THIS CURRICULUM GUIDE IS FOR ADMINISTRATORS AND THEIR ADVISORS TO USE IN MEETING LOCAL, STATE, AND REGIONAL NEEDS IN TRAINING ARCHITECTURAL AND BUILDING CONSTRUCTION TECHNICIANS AT THE POST-HIGH SCHOOL LEVEL. IT WAS DEVELOPED BY A TECHNICAL EDUCATION SPECIALIST AT THE NATIONAL LEVEL. THE GUIDE PROVIDES: (1) A SUGGESTED CURRICULUM PLAN, (2) COURSE OUTLINES WITH EXAMPLES OF TEXTS AND REFERENCES, (3) A SEQUENCE OF TECHNICAL EDUCATION PROCEDURES, (4) LABORATORY LAYOUTS WITH EQUIPMENT COSTS, (5) A DISCUSSION OF THE LIBRARY AND ITS USE, FACULTY AND STUDENT SERVICES, AND (6) A SELECTED LIST OF SCIENTIFIC, TRADE, AND TECHNICAL SOCIETIES CONCERNED WITH THE TECHNOLOGY. THE DOCUMENT IS ILLUSTRATED WITH LINE DRAWINGS AND PHOTOGRAPHS. A BIBLIOGRAPHY IS APPENDED. (GR)

REPORT NUMBER: OE-80062

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (FS5.280:80062, \$1.50)

INSTITUTION NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBERS: ED042041 VT011536

26

PROGRAM AREA: 08

PUBLICATION DATE: AUG 69

TITLE: THE IMPLEMENTATION AND FURTHER DEVELOPMENT OF EXPERIMENTAL CLUSTER CONCEPT PROGRAMS THROUGH TESTING AND EVALUATION INCLUDING PLACEMENT AND FOLLOW-UP OF SUBJECTS. THE CLUSTER CONCEPT PROJECT, PHASE IV. FINAL REPORT.

PERSONAL AUTHOR: MALEY, DONALD

INSTITUTION CODE: LYR45975

SPONSORING AGENCY CODE: RM066004

DESCRIPTOR: BUILDING TRADES; COGNITIVE ABILITY; \*CURRICULUM DEVELOPMENT; ELECTRICAL OCCUPATIONS; \*EXPERIMENTAL PROGRAMS; GRADE 12; METAL WORKING OCCUPATIONS; \*OCCUPATIONAL CLUSTERS; PILOT PROJECTS; PROGRAM DESCRIPTIONS; \*PROGRAM EVALUATION; PSYCHOMOTOR SKILLS; \*TRADE AND INDUSTRIAL EDUCATION; VOCATIONAL INTERESTS

IDENTIFIER: CCP; CLUSTER CONCEPT PROGRAM

EDRS PRICE: EDRS PRICE MF-\$1.50 HC-\$19.20

DESCRIPTIVE NOTE: 382P.

ISSUE: RIEDEC70

THE CLUSTER CONCEPT PROGRAM (CCP) FOR 11TH AND 12TH GRADE VOCATIONAL EDUCATION, HAS COMPLETED ITS SECOND YEAR. THE PROGRAM IS DESIGNED TO PREPARE YOUTH FOR ENTRY LEVEL CAPABILITY IN A VARIETY OF RELATED OCCUPATIONS RATHER THAN A SPECIFIC OCCUPATION. A PRETEST/POSTTEST RESEARCH DESIGN, WITH CONTROL AND EXPERIMENTAL GROUP DESIGN IN CONSTRUCTION CLUSTER GROUPS, METAL FABRICATION CLUSTER GROUPS, AND ELECTROMECHANICAL CLUSTER GROUPS WAS USED TO OBTAIN AN ESTIMATE OF THE EFFECTIVENESS OF THE PROGRAMS. IT WAS FOUND THAT IN SOME SCHOOLS THE PROGRAMS DID SIGNIFICANTLY CHANGE THE STUDENT BEHAVIORS IN THE DIRECTION OF THE STATE OBJECTIVES OF THE PROGRAMS. CHANGES IN COGNITIVE ABILITIES, BROADENED KNOWLEDGE AND JOB INTERESTS, FLEXIBILITY OF OCCUPATIONAL CHOICE AND GROWTH IN THE PERFORMANCE OF SKILL TASKS WERE OBSERVED. THE APPENDICES CONTAIN MEASUREMENT INSTRUMENTS AND ACHIEVEMENT TESTS USED IN PROGRAM EVALUATION. RELATED COURSE OUTLINES AND FINAL REPORTS ARE AVAILABLE AS ED 010 301-ED 010 304, ED 016 841-ED 016 844 AND ED 022 965. (GR)

GRANT NUMBER: OEG-O-8-000833-1865(085)

BUREAU NUMBER: BR-7-0853

INSTITUTION NAME: MARYLAND UNIV., COLLEGE PARK.

ACCESSION NUMBERS: ED043107 EA003048

27

PUBLICATION DATE: MAR 69

TITLE: EDUCATION AND ARCHITECTURE IN THE 20TH CENTURY: A SCHOOL DESIGN WORKSHOP  
(4TH, PETERBOROUGH, ONTARIO, MARCH 25-26, 1969).

INSTITUTION CODE: BBR01978

DESCRIPTOR: ARCHITECTS; ARCHITECTURAL CHARACTER; BUILDING DESIGN; COMPONENT  
BUILDING SYSTEMS; COMPUTER ASSISTED INSTRUCTION; COST EFFECTIVENESS; EDUCATIONAL  
NEEDS; MASTER PLANS; \*SCHOOL CONSTRUCTION; \*SCHOOL DESIGN; \*SCHOOL PLANNING;  
\*WORKSHOPS

IDENTIFIER: CANADA

EDRS PRICE: EDRS PRICE MF-\$0.50 HC-\$3.40

DESCRIPTIVE NOTE: 66P.; SPEECHES, NOTES, AND GROUP REPORTS PREPARED BY WORKSHOP  
PARTICIPANTS

ISSUE: RIEFEB71

THIS REPORT CONTAINS SPEECHES AND NOTES OF WORKSHOP PARTICIPANTS MEETING TO  
DISCUSS IMPROVEMENT OF THE DESIGN AND CONSTRUCTION OF ELEMENTARY AND SECONDARY  
SCHOOL FACILITIES. PARTICIPANTS INCLUDED EDUCATORS, ARCHITECTS, ENGINEERS, AND  
CONTRACTORS. TWENTY-TWO SELECTIONS COVER SUCH TOPICS AS PLANNING COORDINATION  
FOR SCHOOL CONSTRUCTION, COST CONTROL ON SCHOOL DESIGN, THE COMPUTER AS A  
TEACHING AID, AND CONSTRUCTION SYSTEMS. THE DESIRABLE CHARACTERISTICS OF SPECIAL  
FACILITIES FOR PHYSICAL AND HEALTH EDUCATION, MUSIC EDUCATION, MEDIA CENTERS,  
AND LEARNING MATERIAL CENTERS ARE OUTLINED. RELATED DOCUMENTS ARE EA 002 877, EA  
003 049, AND EA 003 050. (PAGES 25-29 MAY REPRODUCE POORLY BECAUSE OF MARGINAL  
LEGIBILITY.) (MLF)

INSTITUTION NAME: ONTARIO DEPT. OF EDUCATION, TORONTO. SCHOOL PLANNING AND  
BUILDING RESEARCH SECTION.

ACCESSION NUMBERS: EDO4310E EA003049

28

PUBLICATION DATE: MAR 70

TITLE: REGIONAL SCHOOL DESIGN WORKSHOP. (11TH, WINDSOR, ONTARIO, MARCH 10-11, 1970).

INSTITUTION CODE: RR801978

DESCRIPTOR: ARCHITECTS; COMPONENT BUILDING SYSTEMS; CONTROLLED ENVIRONMENT; COOPERATIVE PLANNING; FIRE PROTECTION; INSTRUCTIONAL MATERIALS CENTERS; NEIGHBORHOOD CENTERS; OPEN PLAN SCHOOLS; \*SCHOOL CONSTRUCTION; \*SCHOOL DESIGN; \*SCHOOL PLANNING; SITE SELECTION; \*WORKSHOPS

IDENTIFIER: CANADA

EDRS PRICE: EDRS PRICE MF-\$0.25 HC-\$2.15

DESCRIPTIVE NOTE: 53P.; SPEECHES AND NOTES PREPARED BY WORKSHOP PARTICIPANTS

ISSUE: RIEFEB71

THIS REPORT CONTAINS SPEECHES AND NOTES OF WORKSHOP PARTICIPANTS MEETING TO DISCUSS SCHOOL PLANNING. PARTICIPANTS INCLUDED EDUCATORS, ARCHITECTS, ENGINEERS, AND CONTRACTORS. TWENTY-TWO SELECTIONS COVER SUCH TOPICS AS OPEN PLAN SCHOOLS, INSTRUCTIONAL MATERIALS CENTERS, SITE SELECTION, FIRE PROTECTION, ENVIRONMENTAL CONTROL, THE SCHOOL AS A COMMUNITY CENTER, AND TEAM PLANNING IN CONSTRUCTION SYSTEMS FOR BUILDINGS. RELATED DOCUMENTS ARE EA 002 877, EA 003 048, AND EA 003 050. (MLF)

INSTITUTION NAME: ONTARIO DEPT. OF EDUCATION, TORONTO. SCHOOL PLANNING AND BUILDING RESEARCH SECTION.

ACCESSION NUMBERS: ED044496 VT011753

29

PUBLICATION DATE: OCT 70

TITLE: REVIEW AND ANALYSIS OF CURRICULA FOR OCCUPATIONS IN CONSTRUCTION.

PERSONAL AUTHOR: LEWIS, WILEY B.

INSTITUTION CODE: RUF67355

SPONSORING AGENCY CODE: RMQ6600C

DESCRIPTOR: \*BIBLIOGRAPHIES; \*CONSTRUCTION INDUSTRY; \*CURRICULUM DEVELOPMENT; EDUCATIONAL NEEDS; EDUCATIONAL PROGRAMS; \*LITERATURE REVIEWS; METHODOLOGY; \*TRADE AND INDUSTRIAL EDUCATION

EDRS PRICE: EDRS PRICE MF-\$0.25 HC-\$1.80

DESCRIPTIVE NOTE: 34P.

ISSUE: RIEMAR71

EMPHASIS ON NATIONAL GOALS SUCH AS THOSE RELATED TO URBAN DEVELOPMENT, HOUSING, AND TRANSPORTATION WILL CREATE A NEED FOR NEW CONSTRUCTION AND A DEMAND FOR WORKERS IN THE STRUCTURAL, MECHANICAL, AND FINISHING OCCUPATIONS. THIS PROJECTED INCREASE IN DEMAND FOR CONSTRUCTION WORKERS HAS RESULTED IN A NEED TO SYNTHESIZE INFORMATION RELATED TO THE TRAINING OF THOSE SKILLED WORKERS WITH SPECIAL EMPHASIS DIRECTED TOWARD CURRICULA FOR EMERGING OCCUPATIONS. TO ASSIST PRACTITIONERS IN IDENTIFYING CURRENT CURRICULUM OFFERINGS, USEFUL MATERIALS FOR IMPROVING OPERATING PROGRAMS, AND VOIDS IN THE PRESENT RESEARCH FRAMEWORK, A REVIEW AND ANALYSIS WERE MADE OF THE LITERATURE RELATED TO CONSTRUCTION OCCUPATIONS. IN HIS ANALYSIS OF THE LITERATURE THE AUTHOR EXAMINES (1) THE NEED FOR EDUCATIONAL PROGRAMS, (2) CURRICULUM MATERIALS, (3) CURRICULUM DEVELOPMENT, AND (4) METHODOLOGY FOR CURRICULUM DEVELOPMENT. ATTENTION IS DIRECTED TO THE EDUCATIONAL PLANNING SYSTEM FOR CURRICULUM DEVELOPMENT AND THE NEED FOR A COMPLETE COMMUNICATIONS SYSTEM FOR THOSE AFFECTED BY THE EDUCATIONAL PROGRAM. (JS)

REPORT NUMBER: INFO-SER-24

AVAILABILITY: THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION, THE OHIO STATE UNIVERSITY, 1900 KENNY ROAD, COLUMBUS, OHIO 43210

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS. CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBERS: EDD46739 SEC10599

30

PUBLICATION DATE: 70

TITLE: MINIATURE ENVIRONMENTS, AN ENVIRONMENTAL EDUCATION GUIDEBOOK.

INSTITUTION CODE: EBB00413

DESCRIPTOR: \*CONSTRUCTION (PROCESS); CURRICULUM DEVELOPMENT; ECOLOGY;  
ELEMENTARY GRADES; \*ENVIRONMENTAL EDUCATION; \*INSTRUCTIONAL MATERIALS; NATURAL  
RESOURCES; NATURAL SCIENCES; \*SCIENCE PROJECTS; \*TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-\$0.65 HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 24P.

ISSUE: RI MAY71

FOR THE PURPOSES OF BRINGING THE PROCESSES OF NATURE INTO THE CLASSROOM SO STUDENTS CAN HAVE DIRECT, PERSONAL CONTACT WITH THEM, THIS BOOKLET PRESENTS EXAMPLES OF TEACHING TOOLS USEFUL IN A GENERAL APPROACH TO ENVIRONMENTAL EDUCATION. IT DOES NOT DEAL WITH WHAT SHOULD BE TAUGHT ABOUT MAN AND HIS ENVIRONMENT, NOR DOES IT SUGGEST HOW TEACHERS SHOULD TEACH. ITS PURPOSE IS TO DESCRIBE WAYS TO BUILD MINIATURE ENVIRONMENTS FOR LIVING THINGS, USING LOW COST MATERIALS AND EQUIPMENT. THROUGH CONSTRUCTION OF AQUARIUMS AND TERRARIUMS THE MINIATURE ENVIRONMENTS FOR THE LIVING WORLDS OF LAND AND WATER ARE DEVELOPED. WELL DETAILED AS TO THE BACKGROUND, CONSTRUCTION, CONTENT, AND USE OF SUCH ENCLOSED ENVIRONMENTS, THE BOOKLET CONTINUOUSLY EMPHASIZES THE BASIC ELEMENTS AND PROCESSES OF NATURE WHICH ARE VITAL TO ALL ECOSYSTEMS. (BL)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE,  
WASHINGTON, D.C. 20402 (GPO-902-015)

INSTITUTION NAME: DEPARTMENT OF THE INTERIOR, WASHINGTON, D.C. BUREAU OF  
OUTDOOR RECREATION.

ACCESSION NUMBERS: ED046216 SP007130

31

TITLE: TECHNICAL SUBJECTS. MATHEMATICS. SCIENCE. CURRICULUM RP-27.

INSTITUTION CODE: SF068743

DESCRIPTOR: AIR CONDITIONING; AUTO MECHANICS; BUILDING TRADES; \*CURRICULUM GUIDES; DRAFTING; GRADE 9; GRADE 10; GRADE 11; GRADE 12; PLUMBING; \*SECONDARY GRADES; \*TRADE AND INDUSTRIAL EDUCATION; WELDING; WOODWORKING

EDRS PRICE: EDRS PRICE MF-\$0.65 HC-\$9.87

DESCRIPTIVE NOTE: 273P.

ISSUE: RIEJUN71

GRADES OR AGES: GRADES 9-12. SUBJECT MATTER: TECHNICAL SUBJECTS AND SPECIAL MATHEMATICS AND SCIENCE COURSES FOR TECHNICAL STUDENTS. TECHNICAL SUBJECTS INCLUDE AIR CONDITIONING, AUTO MECHANICS, CARPENTRY, DRAFTING, APPLIED ELECTRONICS, MASONRY, PAINTING, PLUMBING, SERVICE STATION OPERATION, WELDING, AND WOODWORKING. ORGANIZATION AND PHYSICAL APPEARANCE: THE GUIDE IS DIVIDED INTO THREE MAIN SECTIONS, ONE EACH FOR A 5-YEAR PROGRAM, A 4-YEAR PROGRAM, AND A 2-YEAR PROGRAM. EACH SECTION CONTAINS COURSE OUTLINES FOR FROM 8 TO 22 COURSES. THE GUIDE IS XEROXED AND PERFECT BOUND WITH A PAPER COVER. OBJECTIVES AND ACTIVITIES: NO SPECIFIC OBJECTIVES OR ACTIVITIES ARE MENTIONED. MOST UNITS SIMPLY LIST IN DETAIL TOPICS TO BE COVERED WITH SUGGESTIONS FOR TIMING. INSTRUCTIONAL MATERIALS: NO MENTION. STUDENT ASSESSMENT: NO MENTION. (RT)

INSTITUTION NAME: ONTARIO DEPT. OF EDUCATION, TORONTO.

ACCESSION NUMBERS: FD050234 VT012011

32

PUBLICATION DATE: MAR 69

TITLE: PROJECT BUILD, A MANPOWER DEMONSTRATION PROGRAM: FEBRUARY, 1968--MARCH, 1969.

PERSONAL AUTHOR: MACKENZIE, JOHN R.; MACKENZIE, HELEN R.

INSTITUTION CODE: FGK01805

SPONSORING AGENCY CODE: BB802779

DESCRIPTOR: \*APPRENTICESHIPS; \*BUILDING TRADES; \*DEMONSTRATION PROGRAMS; \*DISADVANTAGED YOUTH; EDUCATIONALLY DISADVANTAGED; \*INNER CITY; INPLANT PROGRAMS; LABOR UNIONS; REMEDIAL INSTRUCTION; VOCATIONAL EDUCATION

IDENTIFIER: \*PROJECT BUILD

EDRS PRICE: EDRS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTIVE NOTE: 86P.

ISSUE: RIEAUG71

THIS DEMONSTRATION PROJECT WAS DESIGNED TO PREPARE DISADVANTAGED YOUTH FROM THE INNER CITY TO MEET THE REQUIREMENTS FOR, AND PERFORM EFFECTIVELY IN, THE APPRENTICEABLE CONSTRUCTION TRADES IN THE DISTRICT OF COLUMBIA. OF 160 TRAINEES WHO WERE PREPARED FOR APPRENTICESHIP IN TWO 24-WEEK CYCLES, THERE WERE 143 GRADUATES, OF WHOM 120 WERE PLACED IN APPRENTICESHIP. THE REPORT EMPHASIZES THE NEED FOR A COMPREHENSIVE PROGRAM OF REMEDIAL EDUCATION, WORK ORIENTATION, AND SKILL TRAINING TO PREPARE THE INDIVIDUAL FOR APPRENTICESHIP. INDIVIDUAL COUNSELING AND CAREFUL FOLLOWUP ARE ALSO CONSIDERED TO BE OF MAJOR IMPORTANCE. (BH)

INSTITUTION NAME: AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS, WASHINGTON, D.C.

SPONSORING AGENCY NAME: MANPOWER ADMINISTRATION (DOL), WASHINGTON, D.C. OFFICE OF SPECIAL MANPOWER PROGRAMS.

DEVELOPMENT (DHEW/CE), WASHINGTON, D.C.

ACCESSION NUMBERS: EDO54389 VT014088

33

PUBLICATION DATE: 31 AUG 71

TITLE: A JUNIOR HIGH SCHOOL INDUSTRIAL TECHNOLOGY CURRICULUM PROJECT: A FINAL EVALUATION OF THE INDUSTRIAL ARTS CURRICULUM PROJECT (IACP), 1965-1971.

PERSONAL AUTHOR: BUFFER, JAMES J.; AND OTHERS

INSTITUTION CODE: RUF67425

SPONSORING AGENCY CODE: BRB02778

DESCRIPTOR: CONSTRUCTION INDUSTRY; \*CURRICULUM DEVELOPMENT; CURRICULUM EVALUATION; EDUCATIONAL INNOVATION; \*INDUSTRIAL ARTS; INDUSTRIAL TECHNOLOGY; \*INSTRUCTIONAL MATERIALS; JUNIOR HIGH SCHOOLS; MANUFACTURING INDUSTRY; \*PROGRAM EVALUATION; PROJECT TRAINING METHODS; \*RESEARCH PROJECTS; SCHOOL INDUSTRY RELATIONSHIP

IDENTIFIER: IACP; \*INDUSTRIAL ARTS CURRICULUM PROJECT

EDRS PRICE: EDRS PRICE MF-\$0.65 HC-\$13.16

DESCRIPTIVE NOTE: 395P.

ISSUE: RIEDEC71

THE OBJECTIVE OF THE INDUSTRIAL ARTS CURRICULUM PROJECT (IACP) WAS TO DEVELOP, REFINE, AND INSTITUTIONALIZE A NEW AND RELEVANT 2-YEAR JUNIOR HIGH INDUSTRIAL ARTS PROGRAM. THE STUDY FOCUSED ON "INDUSTRIAL TECHNOLOGY," THE KNOWLEDGE OF MANAGEMENT, PRODUCTION, AND PERSONNEL PRACTICES USED BY MEN TO PRODUCE GOODS TO SATISFY THEIR NEEDS THROUGH CONSTRUCTION AND MANUFACTURING ACTIVITIES. AS A RESULT OF A 6 YEAR PROGRAM OF INTENSIVE RESEARCH AND DEVELOPMENT, FIELD TESTING, EVALUATIONS, AND REVISIONS, TWO 1-YEAR COURSES WERE DEVELOPED. THESE COURSES ARE ENTITLED "THE WORLD OF CONSTRUCTION" AND "THE WORLD OF MANUFACTURING." AND THE INSTRUCTIONAL PACKAGES FOR EACH INCLUDE: TEXTBOOKS, LABORATORY MANUALS, TEACHER'S GUIDES, ACHIEVEMENT TESTS, RELATED HARDWARE, AND AUDIO-VISUAL MATERIALS. THE MATERIALS WERE FIELD TESTED OVER A 4-YEAR PERIOD WITH 20,000 STUDENTS IN 13 STATES AND WERE COORDINATED THROUGH 124 HEADQUARTERS AND FIELD STAFF. WORKSHOPS HAVE BEEN CONDUCTED IN 45 COLLEGES AND UNIVERSITIES FOR PREPARING TEACHERS TO ADOPT OR ADAPT THE IACP SYSTEM. THE INSTRUCTIONAL PACKAGES ARE AVAILABLE THROUGH MCKNIGHT AND MCKNIGHT PUBLISHING CO., BLOOMINGTON, ILLINOIS, AND ARE ADAPTABLE TO EXISTING INDUSTRIAL ARTS FACILITIES. (AUTHOR/GFR)

GRANT NUMBER: OEG-3-7-070003-1608

BUREAU NUMBER: BR-7-0003

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS. RESEARCH FOUNDATION.

SPONSORING AGENCY NAME: NATIONAL CENTER FOR EDUCATIONAL RESEARCH AND

BUREAU NUMBER: BR-6-03046

INSTITUTION NAME: UTAH RESEARCH COORDINATING UNIT FOR VOCATIONAL AND TECHNICAL EDUCATION, SALT LAKE CITY.

ACCESSION NUMBERS: ED056793 RC005692

34

PROGRAM AREA: 24

PUBLICATION DATE: JUL 71

TITLE: UTAH INTEGRATED SHOP PROGRAM. FINAL REPORT.

PERSONAL AUTHOR: LOVELESS, AUSTIN G.

INSTITUTION CODE: YEX89990

SPONSORING AGENCY CODE: SBB02778

DESCRIPTOR: BUILDING TRADES; DRAFTING; EDUCATIONAL INNOVATION; \*HIGH SCHOOLS; METALS; POWER MECHANICS; PROGRAM EFFECTIVENESS; \*PROGRAM EVALUATION; \*RURAL SCHOOLS; RURAL URBAN DIFFERENCES; SAFETY; SCHOOL SHOPS; \*SHOP CURRICULUM; \*SMALL SCHOOLS; STANDARDIZED TESTS; TRADE AND INDUSTRIAL EDUCATION; VOCATIONAL EDUCATION; WOODWORKING

IDENTIFIER: UTAH

EDRS PRICE: EDRS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTIVE NOTE: 27P.

ISSUE: RIEMAR72

TO EVALUATE THE UTAH STATE BOARD OF EDUCATION'S INTEGRATED SHOP PROGRAM (ISP) FOR SMALL RURAL HIGH SCHOOLS, 7 ISP SCHOOLS IN THEIR 2ND YEAR (1970-71) OF THE ISP WERE COMPARED ON 3 MEASURES TO 2 SELECTED CONTROL SCHOOLS (SMALL RURAL HIGH SCHOOLS THAT OFFERED VOCATIONAL AGRICULTURAL MECHANICS AND INDUSTRIAL ARTS BUT DID NOT OFFER FORMAL COURSES IN DRAFTING OR POWER MECHANICS). ON PRE- AND POST-TESTS DESIGNED FOR THE ISP, 9TH AND 10TH GRADERS IN THE CONTROL SCHOOLS PERFORMED BETTER IN THE AREAS OF WOODWORK, BUILDING CONSTRUCTION, AND METAL FABRICATION BUT DID NOT PERFORM AS WELL IN DRAFTING AND POWER MECHANICS AS DID STUDENTS IN THE ISP SCHOOLS; THE OVERALL AVERAGE SIGNIFICANTLY (.05 LEVEL) FAVERED THE ISP STUDENTS. ON THE COOPERATIVE INDUSTRIAL ARTS TESTS, PREPARED AND STANDARDIZED BY THE EDUCATIONAL TESTING SERVICE, THE ISP 9TH AND 10TH GRADERS SCORED SIGNIFICANTLY HIGHER (0.5 LEVEL) IN DRAWING THAN THE CONTROL STUDENTS BUT FADED THE SAME AS THE CONTROL STUDENTS IN THE AREAS OF WOODS, METALS, AND ELECTRICITY/ELECTRONICS. THIS TEST BATTERY WAS ALSO ADMINISTERED TO THE 9TH-GRADE INDUSTRIAL ARTS STUDENTS AT 2 UTAH URBAN JUNIOR HIGH SCHOOLS; THESE STUDENTS SCORED BETTER IN ALL AREAS THAN EITHER ISP OR CONTROL STUDENTS (SIGNIFICANT DIFFERENCE WAS REACHED AT THE .05 LEVEL IN ALL AREAS EXCEPT WOODS). ON THE STANFORD ACHIEVEMENT TEST--HIGH SCHOOL TECHNICAL COMPREHENSION, 11TH- AND 12TH-GRADE CONTROL STUDENTS SCORED HIGHER (BUT NOT SIGNIFICANTLY AT THE .05 LEVEL) THAN THE CORRESPONDING ISP STUDENTS. (BO)

GRANT NUMBER: DEG-4-7-063046-1612

ACCESSION NUMBERS: ED057231 VT014322

35

TITLE: ANSWERS TO QUESTIONS ON VOCATIONAL EDUCATION; CURRICULUM PLANNING--METALWORKING, ENVIRONMENTAL CONTROL, PUBLIC SERVICES, CONSTRUCTION, FOOD PROCESSING AND DISTRIBUTION, HEALTH, AND TRANSPORTATION.

PERSONAL AUTHOR: MCCRACKEN, J. DAVID; MAGISOS, JOEL H.

INSTITUTION CODE: RUF67355

DESCRIPTOR: BUILDING TRADES; COMMUNITY AGENCIES (PUBLIC); \*CURRICULUM DEVELOPMENT; ENVIRONMENTAL EDUCATION; FOOD PROCESSING OCCUPATIONS; HEALTH OCCUPATIONS; JOB ANALYSIS; JOB SKILLS; \*OCCUPATIONS; \*SCHOOL INDUSTRY RELATIONSHIP; TRANSPORTATION; \*VOCATIONAL EDUCATION

EDRS PRICE: EDRS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTIVE NOTE: 6P.

ISSUE: RIEMAR72

THIS SHORT BOOKLET CONTAINS QUESTIONS AND ANSWERS CONCERNING ASPECTS OF VOCATIONAL-TECHNICAL EDUCATION, INCLUDING (1) INFORMATION NEEDED WHEN CURRICULUM FOR A NEW OCCUPATION IS INITIATED, (2) IMPORTANCE OF COOPERATING WITH BUSINESS AND INDUSTRY IN PROGRAM DEVELOPMENT, (3) MAKING EDUCATION RESPONSIVE TO EMERGING JOB REQUIREMENTS, AND (4) EXAMPLES OF NEW OCCUPATIONS. THE PUBLICATIONS FROM WHICH THESE ANSWERS WERE DRAWN REVIEW AND SYNTHESIZE RESEARCH IN THE FIELD. INFORMATION ON THEM AND HOW TO ORDER THEM IS INCLUDED. RELATED DOCUMENTS ARE AVAILABLE AS VT 014 333 AND VT 014 334 IN THIS ISSUE. (SB)

AVAILABILITY: CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION, 1900 KENNY ROAD, COLUMBUS, OHIO 43210 (NO CHARGE)

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS. CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION.

ACCESSION NUMBERS: EP058397 VT014241

36

PUBLICATION DATE: 70

TITLE: THE WORLD OF CONSTRUCTION. INDUSTRIAL ARTS CURRICULUM PROJECT.

INSTITUTION CODE: RUF67425

SPONSORING AGENCY CODE: RMW66000

DESCRIPTOR: \*CAREER EDUCATION; CONCEPT TEACHING; \*CONSTRUCTION INDUSTRY;  
FUNDAMENTAL CONCEPTS; \*INDUSTRIAL ARTS; INDUSTRIAL TECHNOLOGY; #INSTRUCTIONAL  
MATERIALS; OCCUPATIONAL GUIDANCE; OCCUPATIONAL INFORMATION; RESOURCE MATERIALS;  
SECONDARY GRADES; STUDY GUIDES; TEXTBOOKS

IDENTIFIER: IACP; INDUSTRIAL ARTS CURRICULUM PROJECT; WORLD OF CONSTRUCTION

EDRS PRICE: EDRS PRICE MF-\$0.65 HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 574P.; FOURTH EDITION

ISSUE: RIEAPR72

THIS TEXTBOOK FOR JUNIOR HIGH SCHOOL STUDENTS ENCOMPASSES CONCEPTS FOUND IN CONSTRUCTION, AND TOGETHER WITH A TEACHER'S GUIDE (VT 014 244) AND TWO LABORATORY MANUALS (VT 014 242 AND VT 014 243), CONSTITUTES THE FIRST PART OF A 2-YEAR INTEGRATED PROGRAM IN INDUSTRIAL TECHNOLOGY. THIS AND THE SECOND YEAR COURSE IN MANUFACTURING WERE DEVELOPED UNDER A CONTRACT FROM THE OFFICE OF EDUCATION. THE MATERIAL WAS WRITTEN BY PROFESSIONALS IN THE CONSTRUCTION FIELD, AND IS INTENDED TO HELP STUDENTS VIEW THE CONSTRUCTION WORLD WITH GREATER UNDERSTANDING, APPRECIATION, AND INSIGHT. SAMPLE TOPICS INCLUDED IN THE 97 ARE: (1) APPLYING TECHNOLOGY TO PEOPLE, (2) SURVEYING AND MAPPING, (3) DESIGNING AND ENGINEERING CONSTRUCTION PROJECTS, (4) ESTIMATING AND BIDDING, (5) BUILDING SUPERSTRUCTURES, (6) INSTALLING ELECTRICAL COMMUNICATIONS SYSTEMS, (7) FINANCING AND CONTRACTING, AND (8) CITY AND REGIONAL PLANNING FACTORS. EXTENSIVE USE IS MADE OF PICTURES AND DRAWINGS FOR ILLUSTRATIONS. RELATED DOCUMENTS ARE AVAILABLE AS VT 014 088 AND VT 014 238-VT 014 240. (GFB)

AVAILABILITY: MCKNIGHT AND MCKNIGHT PUB. CO., ROUTE 66, BLOOMINGTON, ILL. 61701 (\$7.96 LIST PRICE).

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS. RESEARCH FOUNDATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBERS: ED058398 VT014242

37

PUBLICATION DATE: 70

TITLE: THE WORLD OF CONSTRUCTION, LABORATORY MANUAL, SEMESTER 1. INDUSTRIAL ARTS CURRICULUM PROJECT.

INSTITUTION CODE: RUF67425

SPONSORING AGENCY CODE: RMG66000

DESCRIPTOR: \*CAREER EDUCATION; CONCEPT TEACHING; \*CONSTRUCTION INDUSTRY; \*INDUSTRIAL ARTS; INDUSTRIAL TECHNOLOGY; \*INSTRUCTIONAL MATERIALS; \*LABORATORY MANUALS; OCCUPATIONAL GUIDANCE; OCCUPATIONAL INFORMATION; RESOURCE MATERIALS; SECONDARY GRADES

IDENTIFIER: IACP; INDUSTRIAL ARTS CURRICULUM PROJECT; WORLD OF CONSTRUCTION

EDRS PRICE: EDRS PRICE MF-\$0.65 HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 192P.; FOURTH EDITION

ISSUE: RIEAPR72

THIS FIRST SEMESTER LABORATORY MANUAL PROVIDES ACTIVITIES FOR JUNIOR HIGH SCHOOL STUDENTS WHICH REINFORCE CONSTRUCTION CONCEPTS PRESENTED IN THE TEXTBOOK (VT 014 241) AND THE ACCOMPANYING TEACHER'S GUIDE (VT 014 244). EACH OF THE 73 ACTIVITIES INCLUDES A STATED OBJECTIVE AND PROCEDURES FOR CARRYING OUT THE ACTIVITY WITH DRAWINGS, CHARTS, AND PICTURES PROVIDED WHEN NECESSARY. SAMPLE TOPICS INCLUDE: (1) APPLYING TECHNOLOGY TO PEOPLE, (2) SURVEYING AND MAPPING, (3) DESIGNING AND ENGINEERING CONSTRUCTION PROJECTS, (4) ESTIMATING AND BIDDING, (5) BUILDING SUPERSTRUCTURES, AND (6) BUILDING WOOD FRAMES. THE MANUAL FOR THE SECOND SEMESTER IS AVAILABLE AS VT 014 243. OTHER RELATED DOCUMENTS ARE AVAILABLE AS VT 014 088 AND VT 014 238-VT 014 240. (GEF)

AVAILABILITY: MCKNIGHT AND MCKNIGHT PUB. CO., ROUTE 66, BLOOMINGTON, ILL. 61701 (\$1.98 LIST PRICE)

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS. RESEARCH FOUNDATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBERS: EDO58399 VT(14243)

38

PUBLICATION DATE: 70

TITLE: THE WORLD OF CONSTRUCTION, LABORATORY MANUAL, SEMESTER 2. INDUSTRIAL ARTS CURRICULUM PROJECT.

INSTITUTION CODE: RUF67425

SPONSORING AGENCY CODE: RMV66000

DESCRIPTOR: \*CAREER EDUCATION; CONCEPT TEACHING; \*CONSTRUCTION INDUSTRY; \*INDUSTRIAL ARTS; INDUSTRIAL TECHNOLOGY; \*INSTRUCTIONAL MATERIALS; \*LABORATORY MANUALS; OCCUPATIONAL GUIDANCE; OCCUPATIONAL INFORMATION; RESOURCE MATERIALS; SECONDARY GRADES

IDENTIFIER: IACP; INDUSTRIAL ARTS CURRICULUM PROJECT; WORLD OF CONSTRUCTION

EDRS PRICE: EDRS PRICE MF-\$0.65 HC NOT AVAILABLE FROM EDRS.

.DESCRIPTIVE NOTE: 194P.; FOURTH EDITION

ISSUE: RIEAPR72

THIS SECOND SEMESTER LABORATORY MANUAL PROVIDES ACTIVITIES FOR JUNIOR HIGH SCHOOL STUDENTS WHICH REINFORCE CONSTRUCTION CONCEPTS PRESENTED IN THE TEXTBOOK (VT 014 241) AND THE ACCOMPANYING TEACHER'S GUIDE (VT 014 244). EACH OF THE 81 ACTIVITIES INCLUDES A STATED OBJECTIVE AND PROCEDURES FOR CARRYING OUT THE ACTIVITY WITH DRAWINGS, CHARTS, AND PICTURES PROVIDED WHERE NECESSARY. SAMPLE TOPICS INCLUDE: (1) INSTALLING ELECTRICAL COMMUNICATOR'S SYSTEMS, (2) ENCLOSING EXTERIOR WALLS, (3) PLANNING THE LIVING SPACE, (4) BUILDING THE SUBSTRUCTURE, (5) CITY AND REGIONAL PLANNING FACTORS, AND (6) MANAGING COMMUNITY DEVELOPMENT. THE MANUAL FOR THE FIRST SEMESTER IS AVAILABLE AS VT 014 242. OTHER RELATED DOCUMENTS ARE AVAILABLE AS VT 014 088 AND VT 014 238-VT 014 240. (GER)

AVAILABILITY: MCKNIGHT AND MCKNIGHT PUB. CO., ROUTE 66, BLOOMINGTON, ILL. 61701 (\$1.98 LIST PRICE)

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS. RESEARCH FOUNDATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBERS: FD05E400 VTC14244

39

PUBLICATION DATE: 71

TITLE: THE WORLD OF CONSTRUCTION, TEACHER'S GUIDE. INDUSTRIAL ARTS CURRICULUM PROJECT.

INSTITUTION CODE: RUF67425

SPONSORING AGENCY CODE: RMQ66000

DESCRIPTOR: \*CAREER EDUCATION; CONCEPT TEACHING; \*CONSTRUCTION INDUSTRY; CURRICULUM GUIDES; FUNDAMENTAL CONCEPTS; \*INDUSTRIAL ARTS; INDUSTRIAL TECHNOLOGY; \*INSTRUCTIONAL MATERIALS; LESSON PLANS; OCCUPATIONAL GUIDANCE; OCCUPATIONAL INFORMATION; RESOURCE MATERIALS; SECONDARY GRADES; \*TEACHING GUIDES

IDENTIFIER: IACP; INDUSTRIAL ARTS CURRICULUM PROJECT; WORLD OF CONSTRUCTION

EDRS PRICE: EDRS PRICE MF-\$0.65 HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 314P.; FOURTH EDITION

ISSUE: RIEAPR72

THIS TEACHER'S GUIDE ENCOMPASSING THE CONCEPTS FOUND IN THE WORLD OF CONSTRUCTION IS DESIGNED FOR JUNIOR HIGH SCHOOL STUDENTS, TO BE USED AS A TOTAL EDUCATIONAL PACKAGE WITH THE TEXTBOOK (VT 014 241) AND THE LABORATORY MANUALS (VT 014 242 AND VT 014 243). AS THE FIRST PART OF A 2-YEAR INTEGRATED PROGRAM IN WHICH THE SECOND YEAR CONCERNED MANUFACTURING, IT IS DESIGNED TO PREPARE STUDENTS FOR ENLIGHTENED CITIZENSHIP AND TO PROVIDE EDUCATIONAL-OCCUPATIONAL GUIDANCE FOR THE WORLD OF WORK. THIS PROGRAM WAS DESIGNED TO BE USED 45 MINUTES PER DAY FOR 185 DAYS, WITH 22 OPTIONAL ASSIGNMENTS FOR FLEXIBILITY. ASSIGNMENTS COVER THREE MAJOR AREAS: (1) ANALYSIS OF THE MANAGED-PERSONNEL-PRODUCTION SYSTEM OF CONSTRUCTION, (2) SYNTHESIS OF HOUSING CONSTRUCTION PRACTICES, AND (3) SYNTHESIS OF CITY AND REGIONAL PLANNING PRACTICES. EACH OF THE 185 ASSIGNMENT UNITS CONTAINS OBJECTIVES, TIME SCHEDULE, SUGGESTED DEMONSTRATION AND AN OVERVIEW. A LIST OF TEACHER'S AIDS, EQUIPMENT AND MATERIALS, A LIST OF TOOLS AND EQUIPMENT FOR STUDENTS, A LIST OF EXPENDABLE MATERIALS AND A SCALED FLOOR PLAN ARE APPENDED. THREE-RING BINDER FORMAT MAKES REMOVAL OF PAGES EASY. OTHER RELATED DOCUMENTS ARE AVAILABLE AS VT 014 088 AND VT 014 238-VT 014 240. (GEB)

AVAILABILITY: MCKNIGHT AND MCKNIGHT PUB. CO., ROUTE 66, BLOOMINGTON, ILL. 61701  
(\$24.00 LIST PRICE)

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS. RESEARCH FOUNDATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBERS:

VT014195

40

PUBLICATION DATE: JUN71

TITLE: CARPENTRY; BLUEPRINT INTERPRETATION.

PERSONAL AUTHOR: NIKOL, VOJKAN

DESCRIPTOR: \*BLUEPRINTS; \*CARPENTERS; \*BUILDING TRADES; DRAFTING; ILLUSTRATIONS; BIBLIOGRAPHIES; SECONDARY GRADES; \*MANUALS; WOODWORKING; \*TRADE AND INDUSTRIAL EDUCATION

EDRS PRICE: MF AVAILABLE IN VT\_ERIC SET.

DESCRIPTIVE NOTE: 78P.

ISSUE: ARM SPRING1972

DEVELOPED BY DRAFTING INSTRUCTORS, THIS MANUAL IS FOR HIGH SCHOOL VOCATIONAL STUDENTS' USE IN LEARNING HOW TO READ BLUEPRINTS FOR THE CARPENTRY AND BUILDING TRADES. THE 31 LESSONS ARE INCLUDED IN THE MAJOR AREAS OF: (1) GRAPHIC REPRESENTATION, (2) PICTORIAL REPRESENTATION, (3) WORKING DRAWINGS, (4) STRUCTURAL BUILDING DETAILS--EXTERIOR, AND (5) STRUCTURAL BUILDING DETAILS--INTERIOR. EACH LESSON CONTAINS DIRECTIONS AND RELATED INFORMATION, AND MOST ARE ILLUSTRATED WITH LINE DRAWINGS. ILLUSTRATIONS OF THE CROSS SECTION OF A TREE TRUNK, THE SAWING OF LUMBER, COMMON CUTS IN WOOD, COMMON WOODS JOINT, A TABLE FOR NAILS, A WOOD SCREW TABLE, AND THE AMERICAN STANDARD PLUMBING SYMBOLS ARE APPENDED. A 37 QUESTION TEST AND A BIBLIOGRAPHY ARE INCLUDED.. (GEB))

AVAILABILITY: VOCATIONAL-TECHNICAL CURRICULUM LABORATORY, RUTGERS UNIVERSITY, 4103 BUILDING, KILMER CAMPUS, NEW BRUNSWICK, NEW JERSEY 08903 (\$2.00)

INSTITUTION NAME: RUTGERS, THE STATE UNIV., NEW BRUNSWICK, N.J.  
VOCATIONAL-TECHNICAL CURRICULUM LAB.

SPONSORING AGENCY NAME: NEW JERSEY STATE DEPT. OF EDUCATION, TRENTON, DIV. OF VOCATIONAL EDUCATION

ACCESSION NUMBERS:

VTG14189

41

PUBLICATION DATE: 71

TITLE: RECOMMENDED PRACTICES FOR BUILDING WITH CONCRETE MASONRY.

PERSONAL AUTHOR: HANSEN, E.L.; ESPENSCHIED, R.F.

DESCRIPTOR: \*SUPPLEMENTARY TEXTBOOKS; RESOURCE MATERIALS; \*AGRICULTURAL EDUCATION; \*AGRICULTURAL PRODUCTION; VOCATIONAL AGRICULTURE; SECONDARY GRADES; UNITS OF STUDY (SUBJECT FIELDS); ADULT VOCATIONAL EDUCATION; \*MASONRY; \*CONSTRUCTION (PROCESS); BUILDINGS; BUILDING MATERIALS

EDRS PRICE: MF AVAILABLE IN VT\_ERIC SET.

DESCRIPTIVE NOTE: 17P.

ISSUE: AIM SPRING1972

PREPARED BY AN ASSOCIATE PROFESSOR OF AGRICULTURAL EDUCATION AND A PROFESSOR OF AGRICULTURAL ENGINEERING, THIS STUDENT TEXT AND REFERENCE IS FOR USE IN HIGH SCHOOL OR ADULT PRODUCTION AGRICULTURE CLASSES. DESIGNED TO BE COVERED IN 1 TO 4 HOURS, CONTENTS ARE CONCERNED WITH EIGHT PROBLEM AREAS: (1) LAYING OUT THE BUILDING, (2) CONSTRUCTING FOOTINGS, (3) MIXING THE MORTAR, (4) LAYING THE FIRST COURSE, (5) LAYING BLOCK AT CORNERS, (6) BUILDING WALLS, (7) TOOLING MORTAR JOINTS, AND (8) SPECIAL MASONRY APPLICATIONS. THE REFERENCE IS ILLUSTRATED WITH NUMEROUS PHOTOGRAPHS, DRAWINGS, AND DIAGRAMS. (AW)

REPORT NUMBER: VAS-3034

AVAILABILITY: VOCATIONAL AGRICULTURE SERVICE, 434 MUMFORD HALL, UNIVERSITY OF ILLINOIS, URBANA, ILLINOIS 61801 (\$.20)

INSTITUTION NAME: ILLINOIS UNIV., URBANA. VOCATIONAL AGRICULTURE SERVICE.

ACCESSION NUMBERS:

VTP14187

42

PUBLICATION DATE: 71

TITLE: APPLYING ASPHALT ROOFING AND SIDING PRODUCTS.

PERSONAL AUTHOR: ESPENSCHIED, R.F.

DESCRIPTOR: \*SUPPLEMENTARY TEXTBOOKS; RESOURCE MATERIALS; \*AGRICULTURAL EDUCATION; \*AGRICULTURAL PRODUCTION; ADULT VOCATIONAL EDUCATION; SECONDARY GRADES; UNITS OF STUDY (SUBJECT FIELDS); VOCATIONAL AGRICULTURE; \*ROOFING; BUILDINGS; \*CONSTRUCTION (PROCESS); ASPHALTS; BUILDING MATERIALS

EDRS PRICE: MF AVAILABLE IN VT\_ERIC SET.

DESCRIPTIVE NOTE: 25P.

ISSUE: ARM SPRING1972

PREPARED BY AN ASSOCIATE PROFESSOR OF AGRICULTURAL ENGINEERING FOR USE IN HIGH SCHOOL OR ADULT PRODUCTION AGRICULTURE CLASSES, THIS STUDENT TEXT AND REFERENCE DEALS WITH THE PROPER APPLICATION OF ASPHALT ROOFING AND SIDING. AREAS COVERED INCLUDE: (1) AVAILABLE ASPHALT ROOFING AND SIDING PRODUCTS, (2) ACCESSORIES NEEDED, (3) QUANTITY OF ROOFING NEEDED, (4) TYPE OF ROOFING MATERIAL NEEDED, (5) PREPARATION OF DECK FOR ROOFING, (6) APPLICATION OF STRIP SHINGLES, INDIVIDUAL SHINGLES, AND INTERLOCKING SHINGLES, (7) APPLICATION OF ROLL ROOFING, (8) APPLICATION OF ASPHALT SIDING, AND (9) WIND HAZARD TO ROOFING. THE REFERENCE IS ILLUSTRATED WITH NUMEROUS DRAWINGS AND DIAGRAMS. RECOMMENDED TIME FOR COVERING THE MATERIAL IS 2 TO 8 CLOCK HOURS. (AW)

REPORT NUMBER: VAS-3035

AVAILABILITY: VOCATIONAL AGRICULTURE SERVICE, 434 MUMFORD HALL, UNIVERSITY OF ILLINOIS, URBANA, ILLINOIS 61801 (\$.30)

INSTITUTION NAME: ILLINOIS UNIV., URBANA. VOCATIONAL AGRICULTURE SERVICE.

ACCESSION NUMBERS:

VT014142

43

PUBLICATION DATE: AUG70

TITLE: A COURSE OF STUDY GUIDE FOR TEACHING AGRICULTURAL BUILDINGS IN VOCATIONAL AGRICULTURE.

PERSONAL AUTHOR: DUNNS, ELVIN

DESCRIPTOR: AGRICULTURAL EDUCATION; \*VOCATIONAL AGRICULTURE; \*INSTRUCTIONAL MATERIALS; REFERENCE MATERIALS; STUDY GUIDES; \*TEACHING GUIDES; \*BUILDING MATERIALS; OCCUPATIONAL INFORMATION; \*BUILDING TRADES

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 6EP.

ISSUE: ARM SPRING1972

ONE OF 10 COURSE STUDY GUIDES DEVELOPED BY THE DIVISION OF DISTRICT PROGRAMS THROUGH ORGANIZED CONFERENCES AND WORKSHOPS WITH TEACHERS AND OTHERS, THIS GUIDE IS FOR INSTRUCTOR USE IN TEACHING ABOUT AGRICULTURAL BUILDINGS IN VOCATIONAL AGRICULTURE. TWELVE OF THE 13 INSTRUCTIONAL UNITS IN THIS DOCUMENT INCLUDE BOTH CURRICULAR AND STUDENT BEHAVIORAL OBJECTIVES, STUDENTS LEARNING ACTIVITIES, LEARNING MATERIALS, TEACHER MANAGEMENT ACTIVITIES, REFERENCES AND EVALUATIVE PROCEDURES. THE MATERIAL IS DESIGNED TO HELP TEACHERS SAVE TIME, CHALLENGE STUDENTS FOR THE "WORLD OF WORK" AND EVALUATE RESULTS MORE READILY. UNIT TOPICS INCLUDE: (1) SAFETY IN THE SHOP AND ON THE JOB, (2) IDENTIFYING BUILDING MATERIALS, (3) PAINTING AGRICULTURAL FARM BUILDINGS, AND (4) LAYING CONCRETE BLOCK. REFERENCE IS MADE TO OTHER GUIDES FOR INFORMATION ON LEADERSHIP AND RECORDS. RELATED DOCUMENTS ARE AVAILABLE IN THIS ISSUE AS VT 014 137 THROUGH VT 014 141, VT 014 143 AND VT 014 144. (GEE)

INSTITUTION NAME: UTAH STATE BOARD FOR VOCATIONAL EDUCATION, SALT LAKE CITY.  
OFFICE OF VOCATIONAL-TECHNICAL EDUCATION.

ACCESSION NUMBERS: VT014001

44

PUBLICATION DATE: 70

TITLE: BUILDER 3 AND 2. RATE TRAINING MANUAL.

DESCRIPTOR: \*BUILDING TRADES; \*BUILDING MATERIALS; \*SKILLED WORKERS; \*MILITARY TRAINING; SKILL DEVELOPMENT; \*QUALIFICATIONS; VOCATIONAL EDUCATION; STUDY GUIDES; REFERENCE MATERIALS; TEXTBOOKS; MANUALS

IDENTIFIER: \*BUILDER RATINGS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 565P.1970 REVISION.

ISSUE: ARM SPRING1972

DEVELOPED BY THE UNITED STATES NAVY, THIS MANUAL IS INTENDED TO SERVE AS AN AID FOR MEN WHO ARE SEEKING TO ACQUIRE THE THEORETICAL KNOWLEDGE AND OPERATIONAL SKILLS REQUIRED OF CANDIDATES FOR ADVANCEMENT TO BUILDER THIRD CLASS AND BUILDER SECOND CLASS. INCLUDED IN THE 19 CHAPTERS ARE: (1) DRAWINGS AND SPECIFICATIONS, (2) MATERIALS HANDLING AND SCAFFOLDING, (3) WOODWORKING, (4) MASONRY AND CONCRETE, (5) EXTERIOR AND INTERIOR FINISHING, (6) PLASTERING, STUCCOING, AND TILE SETTING, AND (7) CONSTRUCTION SAFETY AND SUPERVISION. PICTURES AND DRAWINGS ARE USED EXTENSIVELY AS ILLUSTRATIONS. (GEF)

REPORT NUMBER: NAVPERS-10648-F

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (\$4.25; D 208.11:B 86/3/970)

INSTITUTION NAME: DEPARTMENT OF THE NAVY, WASHINGTON, D.C. BUREAU OF NAVAL PERSONNEL.

ACCESSION NUMBERS:

VT013864

45

PUBLICATION DATE: 69

TITLE: ARCHITECTURE--DRAFTING AND DESIGN. FOUNDATION CONSTRUCTION (DETAILS).

PERSONAL AUTHOR: HAMES, DAN

DESCRIPTOR: \*INDUSTRIAL ARTS; \*ARCHITECTURE; \*CONSTRUCTION (PROCESS); \*LEARNING ACTIVITIES; \*INSTRUCTIONAL MATERIALS; INDIVIDUALIZED INSTRUCTION; EDUCATIONAL OBJECTIVES; PRETESTS; BIBLIOGRAPHIES; DRAFTING

IDENTIFIER: \*LEARNING ACTIVITY PACKAGES; LAPS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 22P.

ISSUE: ARM SPRING1972

DEVELOPED UNDER A TITLE III PROJECT, THIS LEARNING PACKET IS FOR STUDENT USE IN LEARNING THE METHODS AND MATERIALS USED IN CONSTRUCTING FOUNDATIONS. SECONDARY IDEAS INCLUDE HELPING THE STUDENT TO DEVELOP A BASIC UNDERSTANDING OF FOOTINGS, PIERS AND FOUNDATION WALLS, TO KNOW THE ARRANGEMENT AND SIZES OF BUILDING MATERIALS USED IN THE CONSTRUCTION OF THE BOX SILL FOR THE FRAME HOUSE, AND TO DEVELOP AN ABILITY TO SOLVE PROBLEMS DEALING WITH VOLUMES. THIS DOCUMENT CONTAINS (1) THE STATED IDEAS, (2) STUDENT OBJECTIVES, (3) A PRETEST, (4) SUGGESTED ACTIVITIES, (5) INSTRUCTIONAL AID SHEETS, (6) OPTIONAL ACTIVITIES, (7) ASSEMBLY PROCEDURES, AND (8) A BIBLIOGRAPHY. THE MATERIAL IS DESIGNED SO THAT THE STUDENT MAY PROCEED AT HIS OWN LEARNING RATE. LINE DRAWINGS ARE USED FOR ILLUSTRATIONS. (GEB)

INSTITUTION NAME: HUGHSON UNION HIGH SCHOOL, CALIF.

ACCESSION NUMBERS:

VT013547

46

PUBLICATION DATE: 68

TITLE: INDUSTRIAL WOODWORKING, AN INSTRUCTIONAL GUIDE.

DESCRIPTOR: \*WOODWORKING; \*INDUSTRIAL ARTS; \*TEACHING GUIDES; \*TRADE AND  
INDUSTRIAL EDUCATION; VOCATIONAL EDUCATION; CONSTRUCTION (PROCESS);  
PATTERNMAKING; MASONRY; SCHOOL SAFETY; TESTS; INSTRUCTIONAL MATERIALS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 121P.

ISSUE: AIM WINTER1972

DEVELOPED BY TEACHER-SUPERVISOR COMMITTEES, THIS GUIDE IS FOR TEACHER USE IN PLANNING DAY-TO-DAY INSTRUCTION IN INDUSTRIAL WOODWORKING. PRESENTED IN A 2-COLUMN FORMAT, THIS MATERIAL IS FOR USE OVER A PERIOD OF SIX SEMESTERS AND INCLUDES INDUSTRIAL WOODWORKING FOR BOTH INDUSTRIAL ARTS AND INDUSTRIAL OCCUPATIONS. MAJOR AREAS INCLUDE: (1) BASIC WOODWORKING PRINCIPLES SUCH AS FASTENERS, CUTTING TOOLS, MACHINES, ETC., (2) HOUSE CONSTRUCTION, (3) MASONRY, (4) PATTERNMAKING, AND (5) UPHOLSTERY. A SERIES OF GENERAL INFORMATION UNITS, A LIST OF SAFETY RULES, AND A SIMPLE SAFETY TEST ARE INCLUDED. (GER)

INSTITUTION NAME: LOS ANGELES CITY SCHOOLS, CALIF. DIV. OF INSTRUCTIONAL PLANNING AND SERVICES.

ACCESSION NUMBERS:

VT013362

.47

PUBLICATION DATE: 68

TITLE: HIGHWAY TECHNICIANS PROGRAMS. UNIT VI, HIGHWAY DESIGN AND ESTIMATING.  
TEACHER'S GUIDE.

DESCRIPTOR: \*TEACHING GUIDES; \*VOCATIONAL EDUCATION; \*ENGINEERING TECHNICIANS;  
\*DESIGN; \*ESTIMATED COSTS; CURRICULUM GUIDES; POST SECONDARY EDUCATION; HIGHWAY  
ENGINEERING AIDS; TESTS; ROAD CONSTRUCTION; PLANNING

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 229P.

ISSUE: AIM FALL 1971

DEVELOPED BY THE NEW YORK STATE DEPARTMENT OF EDUCATION AND THE STATE  
DEPARTMENT OF TRANSPORTATION, THIS TEACHER'S GUIDE IS FOR INSTRUCTOR USE IN  
TEACHING HIGHWAY DESIGN AND ESTIMATING. THE HIGHWAY TECHNICIAN PROGRAM, FOR  
WHICH THIS DOCUMENT IS INTENDED, IS TO HELP RELIEVE THE SHORTAGE OF TECHNICIANS  
AND ENGINEERS BY UPGRADING PEOPLE EMPLOYED IN LOWER-LEVEL TECHNICIAN PROGRAMS.  
THE CONTENTS OF THIS DOCUMENT, ILLUSTRATED WITH LINE DRAWINGS, INCLUDE 14  
LESSONS, AMONG WHICH ARE: (1) HIGHWAY CLASSIFICATION, (2) FEATURES OF DESIGN,  
(3) HORIZONTAL ALIGNMENT, (4) ENGINEER'S ESTIMATE, AND (5) REPORT ON DESIGN AND  
ESTIMATE. EACH LESSON CONTAINS OBJECTIVES, A CONTENT OUTLINE, QUESTIONS FOR  
REVIEW, AND AN ASSIGNMENT, AND EACH IS PLANNED FOR 2 HOURS AND 40 MINUTES. A  
3-PART FINAL EXAMINATION, A BIBLIOGRAPHY, AND A REFERENCE KEY SYMBOL LIST ARE  
INCLUDED. RELATED DOCUMENTS ARE AVAILABLE AS VT 013 359, VT 013 360, AND VT 013  
061 (ALL IN THIS ISSUE). (GEB) |

AVAILABILITY: THE PUBLICATIONS DISTRIBUTION UNIT, STATE EDUCATION DEPARTMENT,  
ALBANY, NEW YORK 12224 (SINGLE COPIES).

INSTITUTION NAME: NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF CONTINUING  
EDUCATION CURRICULUM SERVICES.

ACCESSION NUMBERS:

VT013361

48

PUBLICATION DATE: 67

TITLE: HIGHWAY TECHNICIANS PROGRAM. UNIT V, SOILS AND DRAINAGE. TEACHER'S GUIDE.

DESCRIPTOR: \*TEACHING GUIDES; \*VOCATIONAL EDUCATION; \*ENGINEERING TECHNICIANS; \*SOIL CONSERVATION; \*ROAD CONSTRUCTION; CURRICULUM GUIDES; POST SECONDARY EDUCATION; HIGHWAY ENGINEERING AIDS; TRANSPORTATION; TESTS; GLOSSARIES; ENGINEERING TECHNOLOGY

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 207P.

ISSUE: AIM FALL1971

DEVELOPED BY THE NEW YORK DEPARTMENT OF EDUCATION AND THE STATE DEPARTMENT OF PUBLIC WORKS, THIS TEACHER'S GUIDE IS FOR INSTRUCTOR USE IN TEACHING SOILS AND DRAINAGE INFORMATION TO HELP RELIEVE THE SHORTAGE OF HIGHWAY TECHNICIANS. THE HIGHWAY TECHNICIAN PROGRAM IS INTENDED TO HELP PROVIDE ADDITIONAL TECHNICIANS AND ENGINEERS BY TRAINING PERSONNEL EMPLOYED IN LOWER-LEVEL TECHNICIAN JOBS. THE CONTENTS OF THIS DOCUMENT, ILLUSTRATED WITH LINE DRAWINGS, INCLUDE 11 LESSONS, AMONG WHICH ARE: (1) SOIL AND ROCK DEPOSITS IN NEW YORK STATE, (2) SOIL DESCRIPTION, CLASSIFICATION, EXPLORATIONS, AND WATER, (3) ENGINEERING PROPERTIES OF SOILS, AND (4) HIGHWAY DRAINAGE. EACH LESSON, DESIGNED FOR 2 HOURS AND 40 MINUTES, CONTAINS CITED REFERENCES, OBJECTIVES, A CONTENT OUTLINE, AN ASSIGNMENT, AND SOME CONTAIN QUESTIONS FOR REVIEW. A GLOSSARY OF SYMBOLS, A THREE PART FINAL EXAMINATION, AND A BIBLIOGRAPHY ARE INCLUDED. RELATED DOCUMENTS ARE AVAILABLE AS VT 013 359, VT 013 360, AND VT 013 062 (ALL IN THIS ISSUE). (GEB)

AVAILABILITY: THE PUBLICATIONS DISTRIBUTION UNIT, STATE EDUCATION DEPARTMENT, ALBANY, NEW YORK 12224 (SINGLE COPIES).

INSTITUTION NAME: NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF CONTINUING EDUCATION CURRICULUM SERVICES.

ACCESSION NUMBERS: VT013360

49

PUBLICATION DATE: 69

TITLE: HIGHWAY TECHNICIANS PROGRAM. UNIT IV, ELEMENTS OF HIGHWAY PLANNING.  
TEACHER'S GUIDE.

DESCRIPTOR: \*TEACHING GUIDES; \*VOCATIONAL EDUCATION; \*ENGINEERING TECHNICIANS;  
\*ROAD CONSTRUCTION; \*PLANNING; CURRICULUM GUIDES; POST SECONDARY EDUCATION;  
TRANSPORTATION; TRAFFIC SAFETY; TRAFFIC PATTERNS; STATE AGENCIES; TECHNICAL  
EDUCATION

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 117P.

ISSUE: ATM FALL1971

DEVELOPED BY THE NEW YORK STATE DEPARTMENT OF EDUCATION AND THE STATE  
DEPARTMENT OF TRANSPORTATION, THIS TEACHER'S GUIDE IS FOR INSTRUCTOR USE IN  
TEACHING THE ELEMENTS OF HIGHWAY PLANNING AS PART OF A PROJECT TO HELP RELIEVE  
THE SHORTAGE OF HIGHWAY TECHNICIANS. THE HIGHWAY TECHNICIAN PROGRAM IS INTENDED  
TO HELP PROVIDE ADDITIONAL TECHNICIANS AND ENGINEERS BY UPGRADING PEOPLE  
EMPLOYED IN TECHNICIAN JOBS. THE MAIN CONTENTS OF THIS DOCUMENT ARE DIVIDED INTO  
15 LESSONS INCLUDING: (1) FUNDAMENTALS OF HIGHWAY PLANNING, (2) TRAFFIC STUDY,  
ANALYSIS, AND FORECASTING, (3) HIGHWAY SAFETY, LAW, AND FINANCE, AND (4) URBAN  
TRANSPORTATION PLANNING. CITFD REFERENCES, OBJECTIVES, A CONTENT OUTLINE,  
QUESTIONS FOR REVIEW, AND AN ASSIGNMENT ARE INCLUDED IN EACH LESSON AND ARE  
DESIGNED FOR 2 1/2 HOURS EACH. A SUMMARY LIST OF REFERENCES IS INCLUDED. RELATED  
DOCUMENTS ARE AVAILABLE AS VT 013 359, VT 013 361, AND VT 013 362 (ALL IN THIS  
ISSUE). (GEB)

AVAILABILITY: PUBLICATIONS DISTRIBUTION UNIT, NEW YORK STATE DEPARTMENT OF  
EDUCATION, EDUCATION BUILDING, ALBANY, NEW YORK 12224.

INSTITUTION NAME: NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF CONTINUING  
EDUCATION CURRICULUM SERVICES.

ACCESSION NUMBERS:

VTC12359

50

PUBLICATION DATE: 68

TITLE: HIGHWAY TECHNICIANS PROGRAM. UNIT II, HIGHWAY DRAWING. TEACHER'S GUIDE.

DESCRIPTOR: \*TEACHING GUIDES; \*VOCATIONAL EDUCATION; \*ENGINEERING TECHNICIANS;  
\*ENGINEERING DRAWING; \*ROAD CONSTRUCTION; CURRICULUM GUIDES; POST SECONDARY  
EDUCATION; HIGHWAY ENGINEERING AIDS; MAPS; MAP SKILLS; DRAFTING; PLANNING;  
TESTS; GLOSSARIES; TECHNICAL EDUCATION

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 142P.1968 REVISION

ISSUE: AIM FALL1971

DEVELOPED BY THE NEW YORK STATE DEPARTMENT OF EDUCATION AND THE STATE  
DEPARTMENT OF TRANSPORTATION, THIS TEACHER'S GUIDE IS FOR INSTRUCTOR USE IN  
TEACHING HIGHWAY DRAWING AS PART OF A PROJECT TO HELP RELIEVE THE SHORTAGE OF  
HIGHWAY TECHNICIANS. THE PROGRAM IS INTENDED TO HELP PROVIDE ADDITIONAL  
TECHNICIANS AND ENGINEERS BY UPGRADING PEOPLE EMPLOYED IN LOWER-LEVEL TECHNICAL  
JOBS. THE MAIN CONTENTS OF THIS DOCUMENT CONSISTS OF 14 LESSONS THAT INCLUDE:  
1) DRAWING EQUIPMENT AND USES, (2) TOPOGRAPHY, (3) DRAWING REPRODUCTIONS, AND  
(4) HIGHWAY PLANS. EACH LESSON CONTAINS CITED REFERENCES, OBJECTIVES, A CONTENT  
OUTLINE, AN ASSIGNMENT, AND SOME HAVE REVIEW QUESTIONS. EACH LESSON IS DESIGNED  
FOR 2 HOURS AND 40 MINUTES. A GLOSSARY OF ABBREVIATIONS AND A FOUR PART FINAL  
EXAMINATION ARE INCLUDED. RELATED DOCUMENTS ARE AVAILABLE AS VT 013 360, VT 013  
361, AND VT 013 362 (ALL IN THIS ISSUE). (GEB)

AVAILABILITY: THE PUBLICATIONS DISTRIBUTION UNIT, STATE EDUCATION DEPARTMENT,  
ALBANY, NEW YORK 12224 (SINGLE COPIES).

INSTITUTION NAME: NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF CONTINUING  
EDUCATION CURRICULUM SERVICES.

ACCESSION NUMBERS:

VTC13318

51

PUBLICATION DATE: NOV63

TITLE: CONSTRUCTION OF ROADS AND PAVEMENTS. COURSE OUTLINE.

PERSONAL AUTHOR: FARKAS, A.G.

DESCRIPTION: \*TRADE AND INDUSTRIAL EDUCATION; \*CURRICULUM GUIDES; \*CONSTRUCTION (PROCESS); \*ROAD CONSTRUCTION; \*TRANSPORTATION; POST SECONDARY EDUCATION; BUILDING MATERIALS; VOCATIONAL EDUCATION

EDRS PRICE: MF AVAILABLE IN VT-FRIC SET.

DESCRIPTIVE NOTE: 7P.

ISSUE: AIM

DEVELOPED BY THE VOCATIONAL-TECHNICAL DIVISION OF THE NORTH CAROLINA STATE BOARD OF EDUCATION, THIS OUTLINE IS FOR INSTRUCTOR USE IN PLANNING A COURSE ON CONSTRUCTION OF ROADS AND PAVEMENTS. SPECIFIC OBJECTIVES ARE TO: (1) ANALYZE THE EFFECTS OF VARIOUS TYPES OF LOADS ON FLEXIBLE AND RIGID PAVEMENTS, (2) STUDY SUBGRADES, INCLUDING TYPES, PROPERTIES, PREPARATION, STABILIZATION, AND TESTING, (3) TEACH THE DESIGN OF BITUMINOUS SURFACES AND CONCRETE PAVEMENTS, AND (4) STUDY TECHNIQUES AND DETAILS PERTAINING TO PAVEMENTS. THE MATERIAL IS DESIGNED IN OUTLINE FORM WITH 13 MAJOR TOPICS INCLUDED, AND IS RECOMMENDED FOR USE WITH THE TEXT BY LAURENCE HEWES AND OTHERS INTITLED "HIGHWAY ENGINEERING." TWO OTHER SUGGESTED REFERENCES ARE LISTED. A RELATED DOCUMENT IS AVAILABLE AS VT 013 317, ALSO IN THIS ISSUE. (GFB)

REPORT NUMBER: T-CIV-227

INSTITUTION NAME: NORTH CAROLINA STATE BOARD OF EDUCATION, RALEIGH. DEPT. OF COMMUNITY COLLEGES.

ACCESSION NUMBER: VT013317 52

PUBLICATION DATE: NOV63

TITLE: CONSTRUCTION METHODS AND EQUIPMENT. COURSE OUTLINE.

PERSONAL AUTHOR: FARKAS, A.G.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*CURRICULUM GUIDES; POST SECONDARY EDUCATION; \*CONSTRUCTION (PROCESS); \*ROAD CONSTRUCTION; BUILDING MATERIALS; VOCATIONAL EDUCATION; \*TRANSPORTATION; EQUIPMENT; MASONRY; STRUCTURAL BUILDING SYSTEMS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 14P.

ISSUE: AIM FALL1971

DEVELOPED BY THE VOCATIONAL-TECHNICAL DIVISION OF THE NORTH CAROLINA STATE BOARD OF EDUCATION, THIS OUTLINE IS FOR INSTRUCTOR USE IN PLANNING A COURSE ON CONSTRUCTION METHODS AND EQUIPMENT. SPECIFIC OBJECTIVES ARE TO: (1) STUDY METHODS AND EQUIPMENT FOR VARIOUS TYPES OF EXCAVATIONS, AND FOR HIGHWAYS AND PAVEMENT CONSTRUCTION, (2) STUDY TYPES OF PILES, AND TECHNIQUES OF STEEL ERECTION, AND (3) INVESTIGATE RESIDENTIAL BUILDING METHODS AND DETAILS. THE MATERIAL IS PRESENTED IN OUTLINE FORM CONSISTING OF 17 MAJOR TOPICS, AND IS RECOMMENDED FOR USE WITH THE TEXT BY R.L. PEURIFOY ENTITLED "CONSTRUCTION PLANNING, EQUIPMENT, AND METHODS." A LIST OF SUGGESTED REFERENCES IS INCLUDED. A RELATED DOCUMENT IS AVAILABLE AS VT 613 318, ALSO IN THIS ISSUE. (GE6)

REPORT NUMBER: T-CIV-217

INSTITUTION NAME: NORTH CAROLINA STATE BOARD OF EDUCATION, RALEIGH. DEPT. OF COMMUNITY COLLEGES.

ACCESSION NUMBERS:

VTC13299

53

PUBLICATION DATE: 67

TITLE: CONSTRUCTION--SUPERVISION AND INSPECTION, COURSE OF STUDY.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*SUPERVISION; \*CONSTRUCTION PROGRAMS; \*INSPECTION; VOCATIONAL EDUCATION; ROAD CONSTRUCTION; STRUCTURAL BUILDING SYSTEMS; UTILITIES; METALS; TEACHING GUIDES; STUDY GUIDES; BUILDING MATERIALS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 223P.

ISSUE: AIM FALL1971

THIS TEACHING GUIDE, DEVELOPED BY THE BUREAU OF INDUSTRIAL EDUCATION IN COOPERATION WITH THE EDUCATION ADVISORY COMMITTEE OF THE CALIFORNIA COUNCIL OF CONSTRUCTION INSPECTORS ASSOCIATION, IS INTENDED FOR ONE SEMESTER'S INSTRUCTION OF PERSONS WHO WILL BE ENGAGED IN THE SUPERVISION AND CONSTRUCTION OF BUILDINGS UNDER CONSTRUCTION. THE MATERIAL IS DIVIDED INTO SEVEN UNITS WHICH INCLUDE: (1) DUTIES OF THE CONSTRUCTION INSPECTOR, (2) STRUCTURAL WOOD MATERIALS, (3) STRUCTURAL METALS, (4) MASONRY, (5) PAVING, (6) UTILITIES, AND (7) REVIEW AND EXAMINATION. THIS DOCUMENT IS ILLUSTRATED WITH DIAGRAMS, GRAPHS, CHARTS, AND PICTURES. A RELATED DOCUMENT IS AVAILABLE AS VT 013 298 (ALSO IN THIS ISSUE)! (GEB)

REPORT NUMBER: STRUCTURAL-SER-2

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF INDUSTRIAL EDUCATION.

ACCESSION NUMBERS: VT013298

54

PUBLICATION DATE: 66

TITLE: CONSTRUCTION--SUPERVISION AND INSPECTION, COURSE OF STUDY.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*CONSTRUCTION PROGRAMS; \*SUPERVISION; \*INSPECTION; \*STRUCTURAL BUILDING SYSTEMS; VOCATIONAL EDUCATION; CONTRACTS; CIVIL ENGINEERING; BUILDING MATERIALS; PRESTRESSED CONCRETE; GRAPHS; CHARTS; REFERENCE MATERIALS; TEACHING GUIDES; STUDY GUIDES

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 255P.

ISSUE: AIM FALL 1971

THIS TEACHING GUIDE, DEVELOPED BY THE BUREAU OF INDUSTRIAL EDUCATION IN COOPERATION WITH THE EDUCATION ADVISORY COMMITTEE OF THE CALIFORNIA COUNCIL OF CONSTRUCTION INSPECTORS ASSOCIATION, IS INTENDED FOR ONE SEMESTER'S INSTRUCTION OF PERSONS WHO WILL BE ENGAGED IN THE SUPERVISION AND CONSTRUCTION OF BUILDINGS UNDER CONSTRUCTION. THE MATERIAL IS DIVIDED INTO FIVE MAJOR UNITS, AND EACH UNIT CONTAINS SEVERAL SECTIONS. THE FIVE UNITS ARE: (1) CONSTRUCTION CONTRACT DOCUMENTS AND PLAN READING, (2) SITE LAYOUT, (3) BASIC PRINCIPLES OF STRUCTURAL ENGINEERING AND MECHANICS OF MATERIALS, (4) SOIL FUNDAMENTALS, AND (5) CONCRETE CONSTRUCTION. SPECIFIC OBJECTIVES AND OTHER PERTINENT INFORMATION ARE GIVEN FOR EACH UNIT. THIS DOCUMENT IS ILLUSTRATED WITH DIAGRAMS, GRAPHS, CHARTS, AND PICTURES, AND CONTAINS AN EXTENSIVE REFERENCE LIST. THIS DOCUMENT IS IN DRAFT FORM AND WILL BE REFINED AFTER IT HAS BEEN TESTED. A RELATED DOCUMENT IS AVAILABLE AS VT 013 299 (ALSO IN THIS ISSUE). (GEB)

REPORT NUMBER: STRUCTURAL-SER-1

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF INDUSTRIAL EDUCATION.

ACCESSION NUMBERS:

VT013202

55

PUBLICATION DATE: FEB69

TITLE: INDUSTRIAL EDUCATION MATERIALS GUIDE.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*RESOURCE MATERIALS;  
\*INSTRUCTIONAL MATERIALS; \*MANUALS; \*AUDIOVISUAL AIDS; INSTRUCTIONAL FILMS;  
INSTRUCTIONAL AIDS; COMMERCIAL ART; CONSTRUCTION INDUSTRY; DRAFTING; GRAPHIC  
ARTS; TOOL AND DIE MAKERS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 164P.

ISSUE: AIM WINTER1972

DEVELOPED BY THE INDUSTRIAL EDUCATION SECTION OF THE FLORIDA STATE DEPARTMENT OF EDUCATION, THIS RESOURCE GUIDE WAS PREPARED FOR INDUSTRIAL EDUCATION INSTRUCTORS AND OTHER INTERESTED EDUCATORS. THE GUIDE IS A COMPOSITE SOURCE OF AUDIOVISUAL AIDS ON SUBJECTS SUCH AS (1) AIR CONDITIONING, (2) BLUEPRINT READING, (3) COMMERCIAL ART, (4) DRAFTING, (5) CONSTRUCTION--ELECTRICITY, (6) MACHINERY REPAIR, (7) GRAPHIC ARTS, (8) TILE SETTING, AND (9) TOOL AND DIE MAKING. AUDIOVISUAL AIDS FOR WHICH SOURCES ARE PROVIDED INCLUDE CHARTS, FILMS, BULLETINS, BOOKS, MANUALS, AND PAMPHLETS. THIS GUIDE WILL BE UPDATED PERIODICALLY. (JS)

INSTITUTION NAME: FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE. DIV. OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION.

ACCESSION NUMBERS:

VT013028

56

PUBLICATION DATE: 69

TITLE: ELEMENTS OF CONSTRUCTION TECHNOLOGY, SENIOR DIVISION.

DESCRIPTOR: \*CURRICULUM GUIDES; \*VOCATIONAL EDUCATION; \*CONSTRUCTION NEEDS;  
\*ARCHITECTURAL DRAFTING; SAFETY; BIBLIOGRAPHIES; SECONDARY GRADES; TEACHING  
GUIDES; INDUSTRIAL ARTS; INDUSTRIAL TECHNOLOGY

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 14P.

ISSUE: AIM WINTER 1972

DEVELOPED FOR THE ONTARIO SECONDARY SCHOOLS, THIS CURRICULUM GUIDE IS INTENDED  
FOR TEACHER USE IN DEVELOPING LESSONS ON THE ELEMENTS OF CONSTRUCTION TECHNOLOGY  
AND IS DESIGNED FOR USE OVER A 2-YEAR PERIOD. SPECIFIC OBJECTIVES OF THE COURSE  
INCLUDE DEVELOPING A POSITIVE ATTITUDE TOWARD LEARNING, DEVELOPING THE ABILITY  
TO THINK IN THREE-DIMENSIONAL CONCEPTS, AND DEVELOPING SKILL IN THE  
COMMUNICATION OF TECHNICAL TOPICS. THE IMPORTANCE OF SAFETY AND THE VALUE OF  
FIELD TRIPS ARE BRIEFLY DISCUSSED. THE CONTENT OUTLINE INCLUDES THREE DIVISIONS:  
(1) THE CORE, (2) ARCHITECTURAL DRAFTING, AND (3) BUILDING CONSTRUCTION  
PRACTICES. AN EXTENSIVE ANNOTATED BIBLIOGRAPHY FOR EACH DIVISION IS INCLUDED.  
(GEB)

INSTITUTION NAME: DEPARTMENT OF EDUCATION, OTTAWA (ONTARIO).

ACCESSION NUMBERS:

VT013036

57

PUBLICATION DATE: 66

TITLE: AGRICULTURAL MECHANICS COURSE.

DESCRIPTOR: \*AGRICULTURAL EDUCATION; \*CURRICULUM GUIDES; \*TECHNICAL EDUCATION;  
\*AGRICULTURAL OCCUPATIONS; \*AGRICULTURAL ENGINEERING; DRAFTING; CONSTRUCTION  
INDUSTRY; MECHANICS (PROCESS); WELDING; ELECTRICITY

IDENTIFIER: OTTAWA; ONTARIO

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 12P.

ISSUE: AIM WINTER1972

INTENDED FOR GRADES 11 AND 12 AND DEVELOPED BY THE ONTARIO DEPARTMENT OF  
EDUCATION, THIS CURRICULUM GUIDE ON AGRICULTURAL MECHANICS CONTAINS AN OUTLINED  
DESCRIPTION OF TECHNICAL COURSE OFFERINGS. TOPICS ARE: (1) DRAFTING, (2)  
BUILDING CONSTRUCTION, (3) MOTOR MECHANICS, (4) GAS AND ARC WELDING, AND (5)  
ELECTRICITY. THE AIM OF THE COURSES IS TO PREPARE STUDENTS IN AREAS OF ONTARIO,  
WHERE THE ECONOMY IS BASED ON AGRICULTURE AND RELATED INDUSTRY, TO ENTER GAINFUL  
EMPLOYMENT IN THESE FIELDS, OR TO PROCEED IN DIPLOMA COURSES OF AGRICULTURAL  
SCHOOLS. (GB)

REPORT NUMBER: Curr-RP-27A

INSTITUTION NAME: DEPARTMENT OF EDUCATION, OTTAWA (ONTARIO).

ACCESSION NUMBERS:

VT012691

58

TITLE: AGRIBUSINESS CONSTRUCTION (SPECIALIZED STUDY--11TH AND 12TH GRADES). STUDENT STUDY GUIDE, AGRICULTURAL MECHANICS.

DESCRIPTOR: \*STUDY GUIDES; \*AGRICULTURAL ENGINEERING; \*AGRICULTURAL EDUCATION; ELECTRICAL SYSTEMS; OFF FARM AGRICULTURAL OCCUPATIONS; VOCATIONAL AGRICULTURE; GRADE 11; BUILDING MATERIALS; BUILDING TRADES; ROOFING; \*WOODWORKING; PLUMBING; CARPENTERS; FINISHING; HAND TOOLS; GRADE 12

IDENTIFIER: #AGRIBUSINESS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SFT.

DESCRIPTIVE NOTE: 149P.

ISSUE: AIM WINTER1972

DEVELOPED PRIMARILY FOR AGRICULTURE STUDENTS INTERESTED IN A 2-YEAR COURSE IN AGRIBUSINESS CONSTRUCTION, THIS STUDENT STUDY GUIDE CONTAINS 42 INSTRUCTIONAL JOB TITLES TO BE TAUGHT IN GRADES 11 AND 12. SUGGESTIONS ARE THAT JOBS 1-21 BE COMPLETED DURING THE FIRST YEAR AND JOBS 22-41 DURING THE SECOND YEAR. SOME INSTRUCTIONAL JOBS INCLUDED ARE: (1) SELECTING WOOD FOR WOODWORKING, (2) SELECTING A BUILDING SITE, (3) SELECTING AND USING WOODWORKING TOOLS, (4) USING CONCRETE BLOCKS, (5) SELECTING A ROOF TYPE, (6) PLANNING AN ELECTRICAL INSTALLATION, (7) EXTERIOR AND INTERIOR WALL CONSTRUCTION, (8) INSTALLING WINDOW FRAMES AND WINDOWS, (9) USING NAILS, SCREWS, AND BOLTS AS FASTENINGS, (10) HAND FINISHING, AND (11) PIPE WORK--PLUMBING. ILLUSTRATIONS, SUGGESTED LEARNING ACTIVITIES, REFERENCES, QUESTIONS TO ANSWER, EXPERIMENTS, AND PROJECTS ARE INCLUDED. (AS)

AVAILABILITY: VOCATIONAL AGRICULTURAL EDUCATION, FIELD OFFICE, 101 PELTRIE HALL, AUBURN, ALABAMA 36830 (\$1.00, IN LIMITED SUPPLY).

INSTITUTION NAME: ALABAMA STATE DEPT. OF EDUCATION, MONTGOMERY, AGRICULTURAL EDUCATION SERVICE.

ACCESSION NUMBERS:

VT012690

59

TITLE: AGRIBUSINESS MASONRY (SPECIALIZED STUDY--11TH AND 12TH GRADES). STUDENT STUDY GUIDE, AGRICULTURAL MECHANICS.

DESCRIPTOR: \*STUDY GUIDES; \*AGRICULTURAL EDUCATION; \*MASONRY; \*BRICKLAYING; AGRICULTURAL ENGINEERING; OFF FARM AGRICULTURAL OCCUPATIONS; VOCATIONAL AGRICULTURE; BUILDING TRADES; BUILDINGS; GRADE 11; GRADE 12; CONSTRUCTION (PROCESS); PREFABRICATION; STRUCTURAL BUILDING SYSTEMS; BRICKLAYERS

IDENTIFIER: \*AGRIBUSINESS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 160P.

ISSUE: AIM WINTER 1972

DEVELOPED FOR AGRICULTURE STUDENTS INTERESTED IN A TWO-YEAR COURSE IN AGRIBUSINESS MASONRY, THIS STUDENT STUDY GUIDE CONTAINS 20 INSTRUCTIONAL JOBS TO BE TAUGHT IN GRADES 11 AND 12. SUGGESTIONS ARE THAT JOBS 1-9 BE COMPLETED DURING THE FIRST YEAR AND JOBS 10-20 DURING THE SECOND YEAR. SOME INSTRUCTIONAL JOBS INCLUDED ARE: (1) ORIENTATION TO CONCRETE, (2) BLUEPRINT READING, (3) BRICKLAYING, (4) CONCRETE FORMWORK, (5) MASONRY MATHEMATICS, (6) DESIGN AND CONSTRUCTION OF FOOTINGS, (7) FOUNDATIONS AND WATERPROOFING, (8) WALLS AND PARTITIONS, (9) SEPTIC TANK SYSTEMS, AND (10) MAINTENANCE, REPAIR, AND IMPROVEMENT OF MASONRY STRUCTURES. ILLUSTRATIONS, SUGGESTED LEARNING ACTIVITIES, REFERENCES, QUESTIONS TO ANSWER, EXPERIMENTS, AND PROJECTS ARE INCLUDED. (AS)

AVAILABILITY: VOCATIONAL AGRICULTURAL EDUCATION, FIELD OFFICE, 101 PETRIE HALL, AUBURN, ALABAMA 36830 (\$1.00, IN LIMITED SUPPLY).

INSTITUTION NAME: ALABAMA STATE DEPT. OF EDUCATION, MONTGOMERY. AGRICULTURAL EDUCATION SERVICE.

ACCESSION NUMBERS: VT012623 60

PUBLICATION DATE: 70

TITLE: BUILDING CONSTRUCTION EQUIPMENT (TRANSPARENCIES).

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*BUILDING TRADES; \*CONSTRUCTION INDUSTRY; \*TRANSPARENCIES; \*INSTRUCTIONAL MATERIALS; CURRICULUM GUIDES; VOCATIONAL EDUCATION; TEACHING GUIDES; INDUSTRIAL ARTS; REFERENCE MATERIALS; SECONDARY GRADES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 24P.

ISSUE: AIM FALL 1971

PREPARED BY THE OFFICE OF VOCATIONAL EDUCATION OF THE SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION IN COOPERATION WITH THE DEPARTMENT OF INDUSTRIAL EDUCATION AND THE VOCATIONAL EDUCATION MEDIA CENTER OF CLEMSON UNIVERSITY, THESE 20 TRANSPARENCIES AND MASTERS WERE DEVELOPED FOR TEACHER USE IN TRADE AND INDUSTRIES BUILDING CONSTRUCTION PROGRAMS. THEY ARE INTENDED FOR USE IN HIGH SCHOOLS AND AREA VOCATIONAL CENTERS AND ARE TO BE USED WITH A RELATED CURRICULUM GUIDE AVAILABLE AS VT 012 632, ALSO IN THIS ISSUE. (GEB)

AVAILABILITY: VOCATIONAL EDUCATION MEDIA CENTER, CLEMSON UNIVERSITY, CLEMSON, SOUTH CAROLINA 29631 (\$3.75 PER SET OF TRANSPARENCIES).

INSTITUTION NAME: CLEMSON UNIV., S.C. VOCATIONAL EDUCATION MEDIA CENTER.

SPONSORING AGENCY NAME: SOUTH CAROLINA STATE DEPT. OF EDUCATION, COLUMBIA.  
OFFICE OF VOCATIONAL EDUCATION

ACCESSION NUMBERS:

VT012632

61

PUBLICATION DATE: 70

TITLE: CURRICULUM GUIDE FOR TRADES AND INDUSTRIES BUILDING CONSTRUCTION PROGRAMS.

DESCRIPTOR: \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*BUILDING TRADES; INSTRUCTIONAL MATERIALS; TEACHING GUIDES; \*CONSTRUCTION INDUSTRY; VOCATIONAL EDUCATION; INDUSTRIAL ARTS; REFERENCE MATERIALS; SECONDARY GRADES

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 95P.

ISSUE: AIM FALL 1971

PREPARED BY THE OFFICE OF VOCATIONAL EDUCATION OF THE SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION IN COOPERATION WITH THE DEPARTMENT OF INDUSTRIAL EDUCATION AND THE VOCATIONAL EDUCATION MEDIA CENTER OF CLEMSON UNIVERSITY, THIS CURRICULUM GUIDE IS FOR TEACHER USE IN A 2-YEAR HIGH SCHOOL AND AREA VOCATIONAL CENTER BUILDING CONSTRUCTION PROGRAM. THE MATERIAL IS AIMED TOWARD THE DEVELOPMENT OF BASIC MANIPULATIVE SKILLS AND KNOWLEDGE REQUIRED FOR ENTRY INTO THE OCCUPATION OF THE STUDENT'S CHOICE, ALONG WITH THE DEVELOPMENT OF DESIRABLE WORK HABITS AND ATTITUDES. SPECIFIC OBJECTIVES, PROGRAM DESCRIPTION, THE DUTIES OF A CARPENTER, AND AN OUTLINE FOR A 2-YEAR CARPENTRY COURSE ARE INCLUDED IN THIS GUIDE. A CONSIDERABLE AMOUNT OF SUPPLEMENTARY INSTRUCTIONAL MATERIAL AND ADDITIONAL SOURCES OF INFORMATION ARE APPENDED. TRANSPARENCIES TO ACCOMPANY THIS MATERIAL ARE AVAILABLE AS VT 012 633, ALSO IN THIS ISSUE. (GEB)

AVAILABILITY: VOCATIONAL EDUCATION MEDIA CENTER, CLEMSON UNIVERSITY, CLEMSON, SOUTH CAROLINA 29631 (\$1.75).

INSTITUTION NAME: CLEMSON UNIV., S.C. VOCATIONAL EDUCATION MEDIA CENTER.

SPONSORING AGENCY NAME: SOUTH CAROLINA STATE DEPT. OF EDUCATION, COLUMBIA.  
TRADE AND INDUSTRIAL EDUCATION SECTION

ACCESSION NUMBERS:

VT012260

62

PUBLICATION DATE: JUN70

TITLE: TRAINING PROGRAM FOR HOUSING MAINTENANCE EMPLOYEES.

DESCRIPTOR: \*CURRICULUM GUIDES; EDUCATIONAL PROGRAMS; \*BUILDING TRADES;  
\*SKILLED OCCUPATIONS; \*MAINTENANCE; \*TRADE AND INDUSTRIAL EDUCATION

IDENTIFIER: \*HOUSING MAINTENANCE

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 34P.

ISSUE: AIM FALL1971

THIS 6-MONTH TRAINING PROGRAM IS DESIGNED TO BRING INTO THE HOUSING AUTHORITY OF NEW ORLEANS (HANC) YOUNG, UNSKILLED MAINTENANCE TRAINEES HAVING POTENTIAL FOR ADVANCEMENT TO HIGHER SKILLED MAINTENANCE POSITIONS AND TO PROVIDE THEM TRAINING IN THE SPECIALIZED TYPE OF BUILDING MAINTENANCE REQUIRED BY THE HOUSING AUTHORITY. THE PROGRAM CONSISTS OF 158 HOURS OF INSTRUCTION IN 11 CATEGORIES OF BUILDING MAINTENANCE, UPON COMPLETION OF WHICH TRAINEES MUST BE ABLE TO PERFORM THE 79 JOBS THAT MAKE UP THE POSITION OF MAINTENANCE REPAIRMAN FOR HANC.

CONTENTS INCLUDE: (1) BRIEF INTRODUCTORY INFORMATION, (2) PROGRAM STANDARDS, (3) STUDENT SELECTION AND QUALIFICATIONS AND GENERAL INFORMATION ON THE PROGRAM, (4) COURSE OUTLINE, AND (5) TRAINING PROGRAM SCHEDULE, LISTING TIME, DAY, AND DATE OF TRAINING, CATEGORY AND JOB NUMBER, HOURS PER INSTRUCTIONAL UNIT, AND INSTRUCTOR. DIRECTIONS FOR INSTRUCTORS AND VARIOUS SAMPLE FORMS ARE ALSO PROVIDED. (AW)

REPORT NUMBER: NAHRO PUS-NO-N544

AVAILABILITY: NATIONAL ASSOCIATION OF HOUSING AND REDEVELOPMENT OFFICIALS, 2600 VIRGINIA AVENUE, N.W., WASHINGTON, D.C. 20037 (\$2.50).

INSTITUTION NAME: NEW ORLEANS HOUSING AUTHORITY, LA.

SPONSORING AGENCY NAME: NATIONAL ASSOCIATION OF HOUSING AND REDEVELOPMENT OFFICIALS, WASHINGTON, D.C.

ACCESSION NUMBERS:

VTC12233

63

PUBLICATION DATE: JUL70

TITLE: RESOURCE UNIT ON CONSTRUCTION AND MAINTENANCE SKILLS FOR CORE CURRICULUM.  
RESOURCE UNIT NUMBER ELEVN.

DESCRIPTOR: \*AGRICULTURAL EDUCATION; \*RESOURCE UNITS; \*CORE CURRICULUM;  
\*VOCATIONAL AGRICULTURE; \*AGRICULTURAL SKILLS; CONSTRUCTION (PROCESS);  
MAINTENANCE; UNITS OF STUDY (SUBJECT FIELDS); AGRICULTURAL ENGINEERING; COURSE  
DESCRIPTIONS

EDRS PRICE: MF AVAILABLE IN VT-FRIC SET.

DESCRIPTIVE NOTE: 225P.

ISSUE: AIM SUMMER 1971

INTENDED FOR VOCATIONAL AGRICULTURE INSTRUCTION IN AGRICULTURAL MECHANIZATION,  
THIS RESOURCE UNIT ON CONSTRUCTION AND MAINTENANCE SKILLS WAS DEVELOPED BY THE  
ARIZONA DEPARTMENT OF VOCATIONAL EDUCATION AND THE AGRICULTURAL EDUCATION  
DEPARTMENT OF THE UNIVERSITY OF ARIZONA. ACTIVITIES HAVE BEEN SELECTED TO  
PROVIDE STUDENTS AN OPPORTUNITY TO ATTAIN SOME SKILL BEFORE PROGRESSING TO A  
PROJECT THAT WOULD REQUIRE THE APPLICATION OF VARIOUS SKILLS. SKILL AREAS ARE:  
(1) LABOR MANAGEMENT, (2) WORKING DRAWINGS, (3) CONSTRUCTION AND FABRICATION  
WITH WOOD, (4) CONSTRUCTION AND FABRICATION WITH METAL (COLD METAL, ARC WELDING,  
OXYACETYLENE WELDING, PIPE AND TUBING), (5) MAINTENANCE OF WOOD AND METAL  
CUTTING TOOLS, AND (6) SURVEYING. THE SUGGESTED LENGTH OF INSTRUCTION IS 125  
HOURS. (NOT RECOMMENDED FOR HARD COPY REPRODUCTION DUE TO MARGINAL LEGIBILITY OF  
ORIGINAL.) (GB) |

INSTITUTION NAME: ARIZONA UNIV., TUCSON. DEPT. OF AGRICULTURAL  
EDUCATION.; ARIZONA STATE DEPT. OF VOCATIONAL EDUCATION, PHOENIX. AGRICULTURAL  
EDUCATION SECTIO

ACCESSION NUMBERS:

VT011629

64

PUBLICATION DATE: 67

TITLE: CONSTRUCTION SAFETY, PILE DRIVING, AND COFFERDAMS. SAFETY IN INDUSTRY  
INSTRUCTOR OUTLINE. BULLETIN 305.

PERSONAL AUTHOR: OTTO, FRANCIS L.

DESCRIPTOR: \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*SAFETY EDUCATION; \*CONSTRUCTION INDUSTRY; UNITS OF STUDY (SUBJECT FIELDS); SAFETY; INSTRUCTIONAL MATERIALS; CHARTS; INSTRUCTIONAL AIDS; BULLETINS

IDENTIFIER: \*PILE DRIVING

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 67P.

ISSUE: AIM SPRING1971

INTENDED AS A GUIDE TO STANDARD PRESENTATION OF THE SUBJECT IN SEQUENCE AND BASIC CONTENT, THIS INSTRUCTOR OUTLINE ON CONSTRUCTION SAFETY IN PILE DRIVING AND COFFERDAMS IS ONE OF A SERIES DEVELOPED BY STAFF OF THE OFFICE OF OCCUPATIONAL SAFETY AND THE INTERNATIONAL DIVISION, BUREAU OF LABOR STANDARDS. TOPICS INCLUDE: (1) SCOPE AND PURPOSE, (2) THE PROBLEM, (3) WHAT PILING IS, (4) USE OF PILES, (5) TYPES OF PILING, (6) EQUIPMENT, METHODS, AND OPERATING HAZARDS, (7) USES OF SHEET PILING, (8) SCOPE AND PURPOSE OF COFFERDAMS, (9) SUBSURFACE EXPLORATION, AND (10) SUMMARY OF OPERATING SAFETY RULES. INCLUDED ARE TIPS FOR THE INSTRUCTOR AND SUGGESTED PROCEDURES FOR PLANNING, CLASSROOM PREPARATION, AND TEACHING. IN ADDITION, CHARTS AND OTHER TEACHING AIDS ARE PRESENTED. THIS DOCUMENT IS ONE IN A SERIES OF 14 RELATED DOCUMENTS NOW BEING PROCESSED AND ARE AVAILABLE AS VT 011 616-VT 011 629, ALL IN THIS ISSUE. (GB)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (L16.3:305, \$45).

INSTITUTION NAME: BUREAU OF LABOR STANDARDS (DOL), WASHINGTON, D.C.

ACCESSION NUMBERS:

VTC11628

65

PUBLICATION DATE: 67

TITLE: CONSTRUCTION SAFETY, SITE CLEARING. SAFETY IN INDUSTRY INSTRUCTOR OUTLINE. BULLETIN 302.

PERSONAL AUTHOR: CTTO, FRANCIS L.

DESCRIPTOR: \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*SAFETY EDUCATION; \*CONSTRUCTION INDUSTRY; \*SITE DEVELOPMENT; UNITS OF STUDY (SUBJECT FIELDS); SAFETY; INSTRUCTIONAL MATERIALS; CHARTS; INSTRUCTIONAL AIDS; BULLETINS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 27P.

ISSUE: AIM SPRING1971.

INTENDED AS A GUIDE TO STANDARD PRESENTATION OF THE SUBJECT IN SEQUENCE AND BASIC CONTENT, THIS INSTRUCTOR OUTLINE ON CONSTRUCTION SAFETY IN SITE CLEARING IS ONE OF A SERIES DEVELOPED BY STAFF OF THE OFFICE OF OCCUPATIONAL SAFETY AND THE INTERNATIONAL DIVISION, BUREAU OF LABOR STANDARDS. TOPICS ARE: (1) SCOPE AND PURPOSE, (2) PLANNING, (3) HAZARD ANALYSIS, (4) PRUSH CUTTING, (5) FELLING AND BUCKING, (6) GRADING OPERATIONS, (7) DEBRIS DISPOSAL AND BURNING, (8) FIRE HAZARDS, (9) MATERIALS HANDLING AND PILING, (10) POISONOUS PLANTS, (11) INSECTS, VERMIN, REPTILES, AND RODENTS, (12) PRUNING, (13) CLIMBING, (14) STUMPS, (15) TOOL SAFETY, AND (16) CLOTHING AND PERSONAL PROTECTIVE EQUIPMENT. INCLUDED ARE TIPS FOR THE INSTRUCTOR AND SUGGESTED PROCEDURES FOR PLANNING, CLASSROOM PREPARATION, AND TEACHING. IN ADDITION, CHARTS AND OTHER TEACHING AIDS ARE PRESENTED. THIS DOCUMENT IS ONE IN A SERIES OF 14 RELATED DOCUMENTS AVAILABLE AS VT C11 616-VT C11 629, ALL IN THIS ISSUE. (GB)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 'L16.3:302, \$.25).

INSTITUTION NAME: BUREAU OF LABOR STANDARDS (DPL), WASHINGTON, D.C.

ACCESSION NUMBERS:

VT011543

66

PUBLICATION DATE: 69

TITLE: BUILDING TRADES, SKOPJE, YUGOSLAVIA TRAINING CENTRE.

DESCRIPTOR: \*INTERNATIONAL ORGANIZATIONS; \*INTERNATIONAL PROGRAMS; \*JOB TRAINING; \*CONSTRUCTION INDUSTRY; \*CONSTRUCTION PROGRAMS; REPAIR; MAINTENANCE; BUILDING TRADES; TEACHING METHODS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 57P.

ISSUE: ARM SPRING1971

AFTER THE 1963 EARTHQUAKE THE INTERNATIONAL LABOR ORGANISATION COLLABORATED WITH THE GOVERNMENT OF YUGOSLAVIA IN THE ESTABLISHMENT AND INITIAL OPERATION OF A CENTER FOR TRAINING BUILDING CONSTRUCTION PERSONNEL TO RECONSTRUCT SKOPJE. THE CENTER IS THE FIRST VOCATIONAL SCHOOL EVER ESTABLISHED THERE, AND IS INTENDED TO IMPROVE STANDARDS OF TRADE INSTRUCTORS, FOREMEN, AND SKILLED WORKERS, WHICH WILL RAISE THE EFFICIENCY OF CONSTRUCTION, PRODUCTION, MAINTENANCE AND REPAIR OPERATIONS. THE PROGRAM PROVIDES TRAINING IN AREAS OF: (1) ASSEMBLY OF PREFABRICATED BUILDINGS, (2) OPERATION, MAINTENANCE, AND REPAIR OF BUILDING MACHINERY, (3) PLUMBING, HEATING, AND SANITARY INSTALLATIONS, (4) ELECTRICAL INSTALLATIONS, (5) CARPENTRY AND FLOOR LAYING, (6) BRICK AND MASONRY, AND (7) METHODS AND TECHNIQUES OF INSTRUCTING. THE 3-YEAR PROJECT HAS BEEN SUCCESSFUL IN FULFILLING ITS BROAD OBJECTIVES. (GB)

INSTITUTION NAME: INTERNATIONAL LABOUR ORGANISATION, GENEVA (SWITZERLAND)

ACCESSION NUMBERS: VT011538 67

PUBLICATION DATE: 55

TITLE: WOOD HANDBOOK; BASIC INFORMATION ON WOOD AS A MATERIAL OF CONSTRUCTION WITH DATA FOR ITS USE IN DESIGN AND SPECIFICATION. AGRICULTURE HANDBOOK NO. 72.

DESCRIPTOR: \*STUDY GUIDES; \*SUPPLEMENTARY TEXTBOOKS; \*WOODWORKING; \*BUILDING MATERIALS; \*TRADE AND INDUSTRIAL EDUCATION; BUILDING TRADES; CONSTRUCTION (PROCESS); BIBLIOGRAPHIC CITATIONS

EDRS PRICE: MF AVAILABLE IN VT-FRIC SET.

DESCRIPTIVE NOTE: 514P.

ISSUE: AIM SPRING 1971

THIS HANDBOOK, DEVELOPED BY THE FOREST PRODUCTS LABORATORY OF THE UNITED STATES FOREST SERVICE, IS DESIGNED AS AN AID TO UNDERSTANDING THE EFFICIENT USE OF WOOD AS A CONSTRUCTION MATERIAL. MAJOR TOPICS ARE: (1) STRUCTURE AND PHYSICAL PROPERTIES OF WOOD, (2) CHARACTERISTICS OF IMPORTANT COMMERCIAL WOODS, (3) STRENGTH VALUES OF CLEAR WOOD, (4) GRADES AND SIZES OF LUMBER, (5) CONSTRUCTION PROCESSES, (6) CONTROL OF MOISTURE CONTENT AND SHRINKAGE OF WOOD, (7) PAINTING, FINISHING, AND PRESERVING WOOD, (8) POLES, PILING, AND TIES, (9) THERMAL INSULATION, (10) BUILDING FIBERBOARDS, AND (11) MODIFIED WOODS AND PAPER-BASE LAMINATES. BIBLIOGRAPHIC CITATIONS ARE LOCATED AT THE END OF EACH CHAPTER, AND PHOTOGRAPHS, TABLES, AND DIAGRAMS AUGMENT THE TEXT. A GLOSSARY AND SUBJECT INDEX ARE INCLUDED. (SB)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (AL.76:72, \$3.00).

INSTITUTION NAME: DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C. FOREST PRODUCTS LAB.

ACCESSION NUMBERS: VT011499

68

PUBLICATION DATE: JUL 68

TITLE: CRAFTSMANSHIP; THE HANDS WORK. TYPES OF FRAMING CONSTRUCTION.

PERSONAL AUTHOR: RAYMOND, L., AND OTHERS

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*LEARNING ACTIVITIES: HIGH SCHOOL STUDENTS; MANUALS; \*AUTINSTURCTIONAL AIDS; INSTRUCTIONAL MATERIALS; EDUCATIONAL OBJECTIVES; BUILDING TRADES; \*CARPENTERS; \*CONSTRUCTION INDUSTRY

IDENTIFIER: \*ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 21P.

ISSUE: AIM SPRING1971

DEVELOPED WITH ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III FUNDS, THIS LEARNING ACTIVITY PACKAGE INCLUDES INSTRUCTION ON TYPES OF FRAMING CONSTRUCTION. DESIGNED AS A SELF-INSTRUCTIONAL UNIT FOR HIGH SCHOOL STUDENTS, IT CONTAINS: (1) FLOW CHART, (2) GRADING PROCEDURE, (3) RATIONALE, (4) PRIMARY IDEAS, (5) THREE SECONDARY IDEAS, (6) STUDENT OBJECTIVES, (7) ACTIVITIES, AND (8) FINAL EVALUATION. ANSWERS TO PRETEST AND A BIBLIOGRAPHY ARE INCLUDED. (GR)

INSTITUTION NAME: HUGHSON UNION HIGH SCHOOL, CALIF.

ACCESSION NUMBERS:

VTC11415

69

PUBLICATION DATE: 67

TITLE: PLANS AND CONSTRUCTION PROCEDURES FOR SHOP PROJECTS.

DESCRIPTOR: \*RESOURCE MATERIALS; \*AGRICULTURAL EDUCATION; \*PROJECTS;  
\*CONSTRUCTION (PROCESS)

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 35P.

ISSUE: AIM SPRING1971

PLANS, DETAILED CONSTRUCTION PROCEDURES, AND MATERIALS NEEDED ARE PROVIDED FOR THE FOLLOWING SHOP PROJECTS: (1) PIPEFITTING EXERCISE, (2) SAWHORSE, (3) WELDING POSITIONER, (4) SMALL SHELF BRACKET, (5) HEAVY SHELF BRACKET, (6) KNIFE PACK, (7) BENCH AND PICNIC TABLE, (8) LOADING CHUTE, (9) FEED BUNK, (10) SILAGE BUNK, (11) SHEEP FEEDER, (12) 12-FOOT LADDER, (13) PORTABLE EXTENSION OUTLET, (14) STEP LADDER, (15) WALL TOOL CABINET, (16) SHOP STAND, (17) TRACTOR HOIST, AND (18) MITER BOX. (AW))

AVAILABILITY: INSTRUCTIONAL MATERIALS LABORATORY, UNIVERSITY OF MISSOURI, 8 INDUSTRIAL EDUCATION BUILDING, COLUMBIA, MISSOURI 65201.

INSTITUTION NAME: MISSOURI UNIV., COLUMBIA. DEPT. OF AGRICULTURAL EDUCATION.

ACCESSION NUMBERS: VT011383

70

PUBLICATION DATE: MAR70

TITLE: THE CONSTRUCTION INDUSTRY: SELECTED REFERENCES, 1960-1969. CURRENT BIBLIOGRAPHIES NO. 2.

DESCRIPTOR: \*ANNOTATED BIBLIOGRAPHIES; \*CONSTRUCTION INDUSTRY; \*TRADE AND INDUSTRIAL EDUCATION; \*RESOURCE MATERIALS; APPRENTICESHIPS; ECONOMICS; MANPOWER DEVELOPMENT; EMPLOYMENT; INDUSTRIAL RELATIONS; PERIODICALS; WAGES

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 14P.

ISSUE: ARM SPRING1971

THIS BIBLIOGRAPHY CONTAINING SELECTED REFERENCES OF THE CONSTRUCTION INDUSTRY FROM 1960-1969 WAS PREPARED BY THE LIBRARY OF THE UNITED STATES DEPARTMENT OF LABOR. CONTENTS ARE LISTED ALPHABETICALLY BY AUTHOR UNDER THE FOLLOWING SUBJECTS:

SUBJECTS: (1) ECONOMIC ASPECTS, (2) GENERAL, (3) MANPOWER, (4) APPRENTICESHIP AND TRAINING, (5) MINORITIES, (6) THE PHILADELPHIA PLAN, (7) EMPLOYMENT, (8) SEASONALITY, (9) WAGES AND HOURS, (10) INDUSTRIAL RELATIONS ASPECTS, AND (11) PERIODICALS. (GB)

INSTITUTION NAME: DEPARTMENT OF LABOR, WASHINGTON, D.C. LIBRARY.

ACCESSION NUMBERS:

VT011377

71

PUBLICATION DATE: JUN62

TITLE: WOOD PROPERTIES AND PAINT DURABILITY. MISCELLANEOUS PUBLICATION NO. 629.

DESCRIPTOR: \*RESOURCE MATERIALS; \*CONSUMER EDUCATION; \*PAINTING; BUILDING TRADES; \*BUILDING MATERIALS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 12P.

ISSUE: AIM SPRING1971

THIS PUBLICATION OF THE U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE PROVIDES CONSUMER INFORMATION DESIGNED TO SAVE ON THE OVERALL COST OF HOUSE PAINTING. CONTENTS COVER: (1) WOOD PROPERTIES AFFECTING THE LIFE OF PAINT SUCH AS DENSITY AND TEXTURE, RESINS AND OILS, MOISTURE CONTENT, AND WOOD DEFECTS; (2) SELECTION OF BEST WOOD FOR PAINTING INCLUDING SELECTION BY SPECIES, GRADE, GRAIN, OR DENSITY AND TEXTURE, AND (3) SUGGESTIONS FOR PAINTING THE HEAVIER SOFTWOODS. THE PAMPHLET IS ILLUSTRATED WITH PHOTOGRAPHS. (AW)

INSTITUTION NAME: DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C. FOREST SERVICE.

ACCESSION NUMBERS: VT011255

72

PUBLICATION DATE: 61

TITLE: COURSE IN PAINTING AND DECORATING; A WORKBOOK FOR APPRENTICES, PART 3.

PERSONAL AUTHOR: SALINT, EMERY, AND OTHERS

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*BUILDING TRADES; \*INSTRUCTIONAL MATERIALS; \*WORKBOOKS; \*PAINTING; INTERIOR DESIGN; BLUEPRINTS; APPRENTICESHIPS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 94P.

ISSUE: AIM SPRING1971

THIS WORKBOOK, LAST OF A THREE-PART SERIES ON PAINTING AND DECORATING, WAS PREPARED FOR APPRENTICE TRAINING BY THE INSTRUCTIONAL MATERIALS LABORATORY OF THE BUREAU OF INDUSTRIAL EDUCATION. IT IS DESIGNED TO SATISFY THE NEED OF THE APPRENTICE FOR AN ORGANIZED COURSE OF STUDY IN THE TECHNICAL PHASES OF HIS TRADE. MAJOR TOPICS OF STUDY ARE: (1) GLOSS FINISHES, (2) DECORATING, (3) BLUEPRINT READING AND ESTIMATING, (4) DRAWING, AND (5) RECENT INTRODUCTIONS. EACH UNIT CONTAINS REFERENCE, INTRODUCTION, ASSIGNMENT, AND CHECK-UP QUESTIONS. A LIST OF INSTRUCTIONAL MATERIALS AND ANSWERS TO MATHEMATICS PROBLEMS IN UNIT 3 ARE GIVEN. RELATED DOCUMENTS ARE AVAILABLE AS VT 011 253 AND VT 011 254 (ALSO IN THIS ISSUE). (GR)

AVAILABILITY: CALIFORNIA STATE DEPARTMENT OF EDUCATION, FISCAL OFFICE--ORDER SECTION, 721 CAPITOL MALL, SACRAMENTO, CALIFORNIA 95814.

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF INDUSTRIAL EDUCATION.

ACCESSION NUMBERS:

VT011252

73

PUBLICATION DATE: 64

TITLE: DRYWALL CONSTRUCTION, WORKBOOK. PART 2.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*BUILDING TRADES; \*WORKBOOKS;  
\*INSTRUCTIONAL MATERIALS; BUILDING MATERIALS; CONSTRUCTION (PROCESS)

IDENTIFIER: \*DRYWALL CONSTRUCTION

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 178P.

ISSUE: AIM SPRING1971

DRYWALL CONSTRUCTION PART 2, PREPARED UNDER THE DIRECTION OF THE CALIFORNIA STATE EDUCATIONAL ADVISORY COMMITTEE FOR THE DRYWALL TRADE, IS A HIGHLY SPECIALIZED TRAINING GUIDE DESIGNED TO MEET THE NEEDS OF APPRENTICES IN THE DRYWALL TRADES. THE MATERIAL WAS PREPARED BY A COMMITTEE REPRESENTING EMPLOYERS AND EMPLOYEES OF THE DRYWALL TRADES. STUDY UNITS INCLUDE: (1) FRAMING, (2) ADVANCED DRYWALL SYSTEMS, (3) INTERIOR FINISH, AND (4) BASIC WELDING. EACH OF THE SUBTOPICS INCLUDES A WRITTEN DESCRIPTION, LINE DRAWINGS AND PHOTOGRAPHS WHEN NEEDED, AND CHECKUP QUESTIONS. A LIST OF RECOMMENDED INSTRUCTIONAL MATERIALS IS GIVEN. PART 1 OF THIS WORKBOOK IS AVAILABLE AS VT 011 251, ALSO IN THIS ISSUE. (GR)

AVAILABILITY: CALIFORNIA STATE DEPARTMENT OF EDUCATION, FISCAL OFFICE--ORDER SECTION, 721 CAPITOL MALL, SACRAMENTO, CALIFORNIA 95814.

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF INDUSTRIAL EDUCATION.

ACCESSION NUMBERS:

VTC11251

74

PUBLICATION DATE: 69

TITLE: DRYWALL CONSTRUCTION, WORKBOOK. PART 1.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*BUILDING TRADES; APPRENTICESHIPS; \*WORKBOOKS; \*INSTRUCTIONAL MATERIALS; \*BUILDING MATERIALS; CONSTRUCTION (PROCESS)

IDENTIFIER: \*DRYWALL CONSTRUCTION

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 294P.

ISSUE: AIM SPRING1971

DRYWALL CONSTRUCTION PART 1, PREPARED UNDER THE DIRECTION OF THE CALIFORNIA STATE EDUCATION ADVISORY COMMITTEE FOR THE DRYWALL TRADE, IS A HIGHLY SPECIALIZED TRAINING GUIDE DESIGNED TO MEET THE NEEDS OF APPRENTICES IN THE DRYWALL TRADES. MATERIAL FOR THIS REVISED EDITION WAS PREPARED BY A SPECIAL COMMITTEE REPRESENTING EMPLOYERS AND EMPLOYEES OF THE DRYWALL TRADES. STUDY UNITS INCLUDE: (1) MATERIALS AND TOOLS, (2) BASIC DRYWALL APPLICATION, (3) DRYWALL SYSTEMS, AND (4) EXTERIOR COVERING AND FINISHING. EACH SUB-TOPIC INCLUDES A WRITTEN DESCRIPTION, LINE DRAWINGS AND PHOTOGRAPHS WHEN NECESSARY TO ILLUSTRATE A POINT, AND STUDY QUESTIONS. A LIST OF INSTRUCTIONAL MATERIALS REQUIRED FOR THE CLASSROOM LIBRARY IS GIVEN. PART 2 OF THIS WORKBOOK IS AVAILABLE AS VT 011 252, ALSO IN THIS ISSUE. (GR1)

AVAILABILITY: CALIFORNIA STATE DEPARTMENT OF EDUCATION, FISCAL OFFICE--ORDER SECTION, 721 CAPITOL MAIL, SACRAMENTO, CALIFORNIA 95814.

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF INDUSTRIAL EDUCATION.

ACCESSION NUMBERS:

VT01125

75

PUBLICATION DATE: 68

TITLE: COURSE FOR CEMENT MASONS, WORKBOOK.

PERSONAL AUTHOR: ELQUIST, HUGH, AND OTHERS

DESCRIPTOR: \*BUILDING TRADES; TRADE AND INDUSTRIAL EDUCATION; \*INSTRUCTIONAL MATERIALS; \*WORKBOOKS; APPRENTICESHIPS; CONSTRUCTION INDUSTRY; BUILDING MATERIALS

IDENTIFIER: \*CEMENT MASONS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 236P.

ISSUE: AIM SPRING 1971

PREPARED UNDER THE DIRECTION OF THE CALIFORNIA STATE DEPARTMENT OF EDUCATION AND THE BUREAU OF INDUSTRIAL EDUCATION, THIS WORKBOOK IS DESIGNED FOR APPRENTICES TO SUPPLEMENT THEIR WORK AT THE TRADE OF CEMENT MASONRY. STUDY TOPICS INCLUDE: (1) THE APPRENTICE CEMENT AND HIS TRADE, (2) MATHEMATICS FOR THE CEMENT MASON, (3) PLAN READING AND ESTIMATING, (4) THE CEMENT MASON'S TOOLS, (5) THE CEMENT MASON'S MATERIALS, (6) CONCRETE CONSTRUCTION PRACTICES, (7) RESIDENTIAL AND PUBLIC WORKS CONCRETE, AND (8) PATCHING, CLEANING, AND FINISHING FORMED CONCRETES. EACH TOPIC CONTAINS WRITTEN INFORMATION, STUDY ASSIGNMENT, AND STUDY QUESTIONS. A LIST OF INSTRUCTIONAL MATERIALS IS GIVEN. (GR)

AVAILABILITY: CALIFORNIA STATE DEPARTMENT OF EDUCATION, FISCAL OFFICE--ORDER SECTION, 721 CAPITOL MALL, SACRAMENTO, CALIFORNIA 95814.

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF INDUSTRIAL EDUCATION.

ACCESSION NUMBERS:

VTC11212

76

PUBLICATION DATE: 66

TITLE: OCCUPATIONAL TRAINING PLANS FOR USE IN COOPERATIVE PROGRAMS.

DESCRIPTOR: \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*COOPERATIVE EDUCATION; COORDINATORS; \*SKILLED OCCUPATIONS; \*TECHNICAL OCCUPATIONS; BUILDING TRADES; METAL WORKING OCCUPATIONS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 429P.

ISSUE: AIM SPRING1971

THESE OCCUPATIONAL TRAINING PLANS ARE INTENDED TO AID PROGRAM COORDINATORS IN ORGANIZING COOPERATIVE TRADE AND INDUSTRIAL TRAINING PROGRAMS. TRAINING PLAN OUTLINES, COMBINED WITH PROGRESS RECORD FORMS, ARE PRESENTED FOR 45 OCCUPATIONS, INCLUDING: (1) AIRCRAFT, AUTO, ROWLING PINSOTTER, AND INDUSTRIAL SEWING MACHINE MECHANICS, (2) THE BUILDING TRADES OCCUPATIONS OF PLUMBERS, CABINETMAKERS, BRICKLAYERS, CARPENTERS, ELECTRICIANS, AND PAINTERS AND DECORATORS, (3) COMMERCIAL COOKS AND BAKERS, (4) MACHINISTS AND WELDERS, (5) CUSTODIANS AND MAINTENANCE MEN, (6) MEDICAL, DENTAL, AND DIETITIAN'S ASSISTANTS, (7) DRAFTSMEN, (8) APPLIANCE SERVICEMEN, (9) PRINTERS AND LITHOGRAPHERS, AND (10) FURNITURE UPHOLSTERERS AND REPAIRMEN. EACH OUTLINE PROVIDES RELATED INFORMATION, REFERENCES, AND KNOWLEDGE AND SKILLS TO BE LEARNED. THE PLANS ARE DESIGNED FOR USE WITH STUDY GUIDES WHICH MAY BE PURCHASED FROM SOURCES GIVEN WITH THE REFERENCES AT THE END OF EACH OUTLINE. (AW)

AVAILABILITY: INSTRUCTIONAL MATERIALS LABORATORY, TRADE AND INDUSTRIAL EDUCATION SERVICES, 1885 NEIL AVENUE, COLUMBUS, OHIO 43210 (\$4.40).

INSTITUTION NAME: OHIO STATE DEPT. OF EDUCATION, COLUMBUS. TRADE AND INDUSTRIAL EDUCATION SERVICE.

ACCESSION NUMBERS:

VT011205

77

PUBLICATIOL DATE: 70

TITLE: CARPENTRY. A SUGGESTED COURSE OUTLINE.

DESCRIPTOR: \*VOCATIONAL EDUCATION; \*CURRICULUM GUIDES; \*WOODWORKING; \*BUILDING TRADES; \*HIGH SCHOOL STUDENTS; GRADE 11; GRADE 12; COURSE OBJECTIVES; COURSE DESCRIPTIONS; INSTRUCTIONAL AIDS; BIBLIOGRAPHIC CITATIONS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 6CP.

ISSUE: AIM SPRING1971

TO ASSIST TEACHERS AND SUPERVISORS IN ORGANIZING AND IMPROVING VOCATIONAL CARPENTRY PROGRAMS FOR GRADES 11 AND 12, THIS COURSE OUTLINE WAS DEVELOPED BY VOCATIONAL TRADE AND INDUSTRIAL EDUCATION PERSONNEL. EMPHASIS IS PLACED ON INDIVIDUAL INSTRUCTION, DEMONSTRATION, AND APPLICATION, ALLOWING EACH PUPIL TO PROGRESS AT HIS OWN RATE AS DEMONSTRATED BY HIS ABILITY AND APPLICATION. SUGGESTED APPROACHES TO IMPLEMENTATION ARE ACTUAL HOME CONSTRUCTION BY THE CLASS OR COOPERATIVE EDUCATIONAL OPPORTUNITIES ON CONSTRUCTION SITES. UNITS ARE: (1) ORIENTATION, (2) BLUEPRINT READING, (3) APPLIED MATH, (4) APPLIED SCIENCE, (5) FOUNDATIONS, (6) FLOOR FRAMING, (7) WALL FRAMING, (8) ROOF FRAMING, (9) ROOFING, (10) INSULATION, (11) EXTERIOR FINISH, (12) INTERIOR FINISH, AND (13) SPECIAL OPERATIONS. IN ADDITION, A COURSE DESCRIPTION, COURSE OBJECTIVES, EQUIPMENT LIST, BIBLIOGRAPHY, AND TEACHING AIDS WITH SOURCES ARE INCLUDED. (GB)

AVAILABILITY: OHIO TRADE AND INDUSTRIAL EDUCATION SERVICE, INSTRUCTIONAL MATERIALS LABORATORY, THE OHIO STATE UNIVERSITY, 1885 NEIL AVENUE, COLUMBUS, OHIO 43210 (\$1.00).

INSTITUTION NAME: OHIO STATE DEPT. OF EDUCATION, COLUMBUS. TRADE AND INDUSTRIAL EDUCATION SERVICE.

ACCESSION NUMBERS:

VT011154

78

PUBLICATION DATE:

69

TITLE: BASIC CARPENTRY CONSTRUCTION VISUALS FOR AGRICULTURE.

DESCRIPTOR: \*AUDIVISUAL AIDS; \*VOCATIONAL AGRICULTURE; INSTRUCTIONAL MATERIALS; CARPENTERS; \*CONSTRUCTION (PROCESS); SECONDARY GRADES

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 41P.

ISSUE: AIM SPRING1971

DEVELOPED BY A VOCATIONAL AGRICULTURE INSTRUCTOR AND AN ASSOCIATE PROFESSOR OF AGRICULTURAL EDUCATION, THIS SET OF OVERLAY MASTERS IS INTENDED FOR USE IN THE CARPENTRY CONSTRUCTION UNIT OF THE HIGH SCHOOL VOCATIONAL AGRICULTURE PROGRAM. THE 38 MASTERS COVER: (1) LUMBER, (2) BILL OF MATERIALS, (3) CONSTRUCTION JOINTS AND PROCEDURES, (4) CLEAR SPAN CONSTRUCTION, (5) ROOF TYPES, (6) USE OF THE FRAMING SQUARE, (7) PATTERNS, (8) GLUES, (9) PLYWOOD, (10) BUILDING HARDWARE, AND (11) ROOFING MATERIALS. A LIST OF SUBJECT MATTER SOURCES RECOMMENDED TO SUPPLEMENT THE OVERLAY MASTERS IS ALSO PROVIDED. (AW)

REPORT NUMBER: AG-MECH-1

INSTITUTION NAME: IONA VOCATIONAL AGRICULTURAL TEACHERS' ASSOCIATION.

ACCESSION NUMBERS:

VTC11048

79

PUBLICATION DATE: 64

TITLE: TILESETTING WORKBOOK. SECOND EDITION.

DESCRIPTOR: \*STUDY GUIDES; WORKBOOKS; \*TRADE AND INDUSTRIAL EDUCATION;  
\*CERAMICS; \*CONSTRUCTION INDUSTRY; \*APPRENTICESHIPS

IDENTIFIER: \*TILESETTING

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 22pp.

ISSUE: AIM WINTER 1970

DEVELOPED WITH THE AID OF AN ADVISORY COMMITTEE REPRESENTING EMPLOYERS AND  
EMPLOYEES OF THE TILESETTING INDUSTRY, THIS WORKBOOK CONTAINS SPECIALIZED  
INFORMATION FOR THE TILESETTING TRADE, AND IS DESIGNED TO BE USED IN A RELATED  
TRAINING COURSE FOR APPRENTICES WORKING AT THE TILESETTING TRADE. THE MAJOR  
UNITS ARE: (1) THE APPRENTICE TILESETTER, (2) TILE, MATERIALS, AND TOOLS, (3)  
BLUEPRINTS AND SPECIFICATIONS, (4) JOB PROCESSES, AND (5) SPECIALIZED JOBS.  
TOPICS WITHIN EACH UNIT GIVE AN ASSIGNMENT, AN INTRODUCTION, RELATED  
INFORMATION, AND REVIEW QUIZ. PHOTOGRAPHS, LINE DRAWINGS, GLOSSARY, AND A LIST  
OF INSTRUCTIONAL MATERIALS ARE INCLUDED. A RELATED DOCUMENT IS AVAILABLE AS VT  
004 715 (AIM FALL 1968). (GRJ)

AVAILABILITY: FISCAL OFFICE, CALIFORNIA STATE DEPARTMENT OF EDUCATION, 721  
CAPITOL MALL, SACRAMENTO, CALIFORNIA 95814 (\$2.50).

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO.  
INSTRUCTIONAL MATERIALS LAB.

ACCESSION NUMBERS: VT011047 80

PUBLICATION DATE: 69

TITLE: LOAD CALCULATION: COMMERCIAL HEATING AND AIR CONDITIONING. TEACHING MANUAL.

DESCRIPTOR: \*COURSE CONTENT; \*SUPPLEMENTARY TEXTBOOKS; BUILDING TRADES; \*THERMAL ENVIRONMENT; \*SALES WORKERS; MERCHANDISE INFORMATION; \*CALCULATION; STATISTICAL DATA; TEACHING GUIDES

IDENTIFIER: LENNOX EDUCATIONAL DIVISION; \*COMMERCIAL LOAD CALCULATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: .52P.

ISSUE: ARM SPRING1972

DEVELOPED BY THE LENNOX EDUCATIONAL DIVISION AND TESTED IN OVER 25 CLASSES DURING ONE YEAR, THIS MANUAL IS FOR TEACHER USE IN TRAINING SALESMEN IN THE WARM AIR HEATING AND AIR CONDITIONING BUSINESS TO CALCULATE LOADS FOR COMMERCIAL ESTABLISHMENTS. THE MATERIAL COVERS APPROXIMATELY 25 HOURS, AND INCLUDES LINE DRAWINGS AND LOAD CALCULATION CHARTS. PSYCHROMETRIC CHARTS, LOAD CALCULATION FORMS AND WORK SHEETS ARE NEEDED TO SUPPLEMENT THE COURSE. RELATED DOCUMENTS ARE AVAILABLE AS VT 011 045 AND VT 011 046 (BOTH IN THIS ISSUE). (GR)

AVAILABILITY: LENNOX INDUSTRIES, INC., EDUCATIONAL DIVISION, P.O. BOX 250, MARSHALLTOWN, IOWA 50158.

INSTITUTION NAME: LENNOX INDUSTRIES, INC., MARSHALLTOWN, IOWA.

ACCESSION NUMBERS:

VTG11045

81

PUBLICATION DATE: 69

TITLE: LOAD CALCULATION: RESIDENTIAL HEATING AND AIR CONDITIONING. TEACHING MANUAL.

DESCRIPTOR: COURSE CONTENT; \*UNITS OF STUDY (SUBJECT FIELDS); BUILDING TRADES; \*THERMAL ENVIRONMENT; \*SALES WORKERS; MERCHANTISF INFORMATION; \*CALCULATION; STATISTICAL DATA; \*TEACHING GUIDES

IDENTIFIER: LENNOX EDUCATIONAL DIVISION; \*RESIDENTIAL LOAD CALCULATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 100P.

ISSUE: ARM SPRING1972

THIS MANUAL IS FOR TEACHER USE IN PLANNING A TRAINING PROGRAM TO PREPARE SALES MEN FOR WARM AIR DEALERS OR CONTRACTORS TO CALCULATE HEAT GAIN AND LOSS OF A RESIDENTIAL STRUCTURE. DEVELOPED BY THE LENNOX EDUCATIONAL DIVISION AND TESTED IN OVER 25 CLASSES DURING ONE YEAR, THE MATERIAL COVERS APPROXIMATELY 25 HOURS. THE DOCUMENT CONTAINS LINE DRAWINGS AND LOAD CALCULATION COMPUTATION CHARTS. SUPPLEMENTAL MATERIALS NEEDED ARE PSYCHROMETRIC CHARTS, LOAD CALCULATION FORMS AND WORK SHEETS. RELATED DOCUMENTS ARE AVAILABLE AS VT 011 046 AND VT 011 047 (BOTH IN THIS ISSUE). (GR)

AVAILABILITY: LENNOX INDUSTRIES, INC., EDUCATIONAL DIVISION, P.O. BOX 250, MARSHALLTOWN, IOWA 50158

INSTITUTION NAME: LENNOX INDUSTRIES, INC., MARSHALLTOWN, IOWA.

ACCESSION NUMBERS:

VTC10640

82

PUBLICATION DATE: 66

TITLE: MIXING MORTAR, LESSON 1 OF SKILLS SERIES.

DESCRIPTOR: \*INSTRUCTIONAL MATERIALS; \*AUTODIRECTED INSTRUCTIONAL AIDS; PSYCHOMOTOR SKILLS; \*SKILL DEVELOPMENT; \*INDUSTRIAL EDUCATION; BUILDING TRADES; \*BRICKLAYERS; \*MASONRY; BUILDING MATERIALS

IDENTIFIER: \*MORTAR

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

- DESCRIPTIVE NOTE: 30P.

ISSUE: AIM WINTER1970

THIS SKILLS LESSON BOOKLET, DEVELOPED BY THE REHABILITATION RESEARCH FOUNDATION FOR STUDENT USE, CONTAINS STEP-BY-STEP INSTRUCTIONS FOR MIXING MORTAR. THE STUDENT READS EXPLANATORY TEXT AND ANSWERS QUESTIONS, CHECKING HIS ANSWERS WITH ANSWERS INCLUDED IN A SEPARATE SECTION. A PRETEST AND DUPLICATE POSTTEST ARE INCLUDED. (GR).

AVAILABILITY: TRADE AND INDUSTRIAL EDUCATION, STATE DEPARTMENT OF EDUCATION, P.O. BOX 2847, UNIVERSITY, ALABAMA 35486 (\$.45).

INSTITUTION NAME: REHABILITATION RESEARCH FOUNDATION, ELMORE, ALA.

SPONSORING AGENCY NAME: DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, WASHINGTON, D.C.; DEPARTMENT OF LABOR, WASHINGTON, D.C.

ACCESSION NUMBERS:

VTC1C627

83

PUBLICATION DATE: DEC68

TITLE: PLUMBING, A STUDY GUIDE.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*COOPERATIVE EDUCATION; \*PLUMBING; BUILDING TRADES; \*STUDY GUIDES; BIBLIOGRAPHIES; INQUIRY TRAINING

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 91P.

ISSUE: AIM FALL1970

PREPARED BY TRADE AND INDUSTRIAL EDUCATION COORDINATORS FOR HIGH SCHOOL COOPERATIVE STUDENTS PREPARING FOR THE PLUMBING TRADES, THE STUDY GUIDE INCLUDES A BIBLIOGRAPHY, A PROGRESS RECORD CHART, AND 70 JOB ASSIGNMENTS AND INFORMATION LESSONS. AN ANSWER BOOK MAY BE OBTAINED FROM THE SOURCE OF AVAILABILITY INDICATED FOR THIS DOCUMENT. (GR))

AVAILABILITY: TRADE AND INDUSTRIAL EDUCATION, STATE DEPARTMENT OF EDUCATION, P.O. BOX 2847, UNIVERSITY, ALABAMA 35486 (\$1.10, ANSWER BOOK \$1.25).

INSTITUTION NAME: ALABAMA UNIV., UNIVERSITY. DEPT. OF TRADE AND INDUSTRIAL EDUCATION

ACCESSION NUMBERS:

VTO10612

84

TITLE: BUILDING CONSTRUCTION (COURSE OUTLINE AND EQUIPMENT GUIDE).

DESCRIPTOR: \*BUILDING TRADES; \*CONSTRUCTION INDUSTRY; CONSTRUCTION (PROCESS); \*STATE CURRICULUM GUIDES; COURSE CONTENT; COURSE OBJECTIVES; \*TRADE AND INDUSTRIAL EDUCATION; AUDIOVISUAL AIDS; EQUIPMENT STANDARDS; BUILDING EQUIPMENT; SCHOOL SHOPS

IDENTIFIER: WEST VIRGINIA

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 34P.

ISSUE: AIM WINTER1970

DEVELOPED BY STATE STAFF AND VOCATIONAL EDUCATION INSTRUCTORS IN INSERVICE WORKSHOPS, THIS COURSE OUTLINE AND EQUIPMENT GUIDE IS FOR TEACHER USE IN PLANNING AND TEACHING A 2-YEAR 4-SEMESTER COURSE FOR VOCATIONAL STUDENTS IN BUILDING CONSTRUCTION. CONTENTS INCLUDE: (1) COURSE OBJECTIVES, (2) PURPOSE OF VOCATIONAL INDUSTRIAL EDUCATION, (3) COURSE CONTENT, AND (4) COURSE OUTLINE. A SUGGESTED EQUIPMENT LIST, TOOL LIST, STUDENT TOOL KIT, SHOP LAYOUT AND SPECIFICATIONS, AND BIBLIOGRAPHY OF TEXTBOOKS, REFERENCES, AND AUDIOVISUAL AIDS, ARE APPENDED. (GR)

AVAILABILITY: WEST VIRGINIA STATE BOARD OF EDUCATION, BUREAU OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION, VOCATIONAL INDUSTRIAL EDUCATION SERVICE, CHARLESTON, WEST VIRGINIA 25305 (\$1.25).

INSTITUTION NAME: WEST VIRGINIA STATE BOARD OF EDUCATION, CHARLESTON. BUREAU OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION.

ACCESSION NUMBERS: VTC10543. 85

PUBLICATION DATE: OCT68

TITLE: BUILDING MAINTENANCE, A STUDY GUIDE.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*STUDY GUIDES; ANSWER KEYS;  
BIBLIOGRAPHIES; \*INQUIRY TRAINING; \*BUILDING TRADES; \*MAINTENENCE

IDENTIFIER: \*BUILDING MAINTENANCE

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 124P.

ISSUE: AJM FALL1970

PREPARED BY TRADE AND INDUSTRIAL EDUCATION COORDINATORS FOR HIGH SCHOOL STUDENTS IN COOPERATIVE EDUCATION STUDYING BUILDING MAINTENANCE, THE STUDY GUIDE INCLUDES A BIBLIOGRAPHY, A PROGRESS RECORD CHART, AND 91 JOB ASSIGNMENTS AND INFORMATION LESSONS AND QUESTIONS. UNITS ARE: (1) BLUEPRINT READING, (2) ELECTRICAL WORK, (3) HEATING, (4) AIR CONDITIONING, (5) PLUMBING, INCLUDING COLD WATER SUPPLY, DRAINAGE SYSTEMS, AND HOT WATER SUPPLY, (6) CARPENTRY, (7) MACHINE SHOP PRACTICE, AND (8) GLAZING. AN ANSWER BOOK "ANSWERS, BUILDING MAINTENENCE" MAY BE OBTAINED FROM THE SOURCE OF AVAILABILITY INDICATED FOR THIS DOCUMENT. (GR)

REPORT NUMBER: FILE NO. 1589

AVAILABILITY: TRADE AND INDUSTRIAL EDUCATION, STATE DEPARTMENT OF EDUCATION, P.O. BOX 2847, UNIVERSITY, ALABAMA 35486 (\$2.00, ANSWER BOOK \$1.50).

INSTITUTION NAME: ALABAMA UNIV., UNIVERSITY. DEPT. OF TRADE AND INDUSTRIAL EDUCATION

ACCESSION NUMBERS:

VT010574

86

PUBLICATION DATE: OCT68

TITLE: ELECTRICAL WIRERMAN.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICIANS: BUILDING TRADES;  
SKILLED OCCUPATIONS; ELECTRIC MOTORS; \*STUDY GUIDES; BIBLIOGRAPHIES; \*JOB  
TRAINING; ANSWER KEYS; \*INQUIRY TRAINING

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 130P.

ISSUE: AIM WINTER1970

TRADE AND INDUSTRIAL EDUCATION COORDINATOR AND INSTRUCTORS PREPARED THIS STUDY  
GUIDE FOR STUDENTS STUDYING ELECTRICAL WIRING. NINETY-FOUR JOB ASSIGNMENTS ARE  
ARRANGED IN THREE SECTIONS COVERING: (1) FUNDAMENTALS OF ELECTRICITY AND  
BLUEPRINT READING, (2) HOUSE WIRING, AND (3) COMMERCIAL WIRING. AFTER COMPLETING  
THE ASSIGNMENT SHEETS AND RELATED READING ASSIGNMENTS KEYED TO A BIBLIOGRAPHY  
INCLUDED WITH THE GUIDE, THE STUDENT RECORDS HIS PROGRESS ON A PROGRESS RECORD  
SHEET, ALSO INCLUDED. AN ANSWER BOOK "ELECTRICAL WIRERMAN, ANSWER BOOK" MAY BE  
OBTAINED FROM THE SOURCE OF AVAILABILITY INDICATED FOR THIS DOCUMENT. (GR)

REPORT NUMBER: FILE NO. 1558

AVAILABILITY: TRADE AND INDUSTRIAL EDUCATION, STATE DEPARTMENT OF EDUCATION,  
P.O. BOX 2847, UNIVERSITY, ALABAMA 35486 (\$2.00, ANSWER BOOK \$1.50).

INSTITUTION NAME: ALABAMA UNIV., UNIVERSITY. DEPT. OF TRADE AND INDUSTRIAL  
EDUCATION.

ACCESSION NUMBERS:

VTC10F6S

87

PUBLICATION DATE: 69

TITLE: INDUSTRIAL COOPERATIVE TRAINING REFERENCE MANUAL.

DESCRIPTOR: \*VOCATIONAL EDUCATION; \*INDUSTRIAL EDUCATION; #REFERENCE MATERIALS;  
\*COOPERATIVE EDUCATION; \*INSTRUCTIONAL MATERIALS; HEALTH OCCUPATIONS EDUCATION;  
BUILDING TRADES; AUTO MECHANICS; AUTO BODY REPAIRMEN; AUTO PARTS MEN; APPLIANCE  
SERVICE TECHNICIANS; COOKS; FURNITURE INDUSTRY; PARAMEDICAL OCCUPATIONS;  
MACHINISTS; PUBLISHING INDUSTRY

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 42P.

ISSUE: AIM WINTER1970

DEVELOPED IN A CURRICULUM MATERIALS CENTER, THIS REFERENCE MANUAL IS A LISTING OF STUDY GUIDES, REFERENCE BOOKS, AND OTHER REFERENCE MATERIALS FOR USE IN INDUSTRIAL COOPERATIVE TRAINING PROGRAMS ON THE SECONDARY LEVEL. MATERIALS ARE LISTED FOR 32 OCCUPATIONS, INCLUDING: (1) APPLIANCE, RADIC AND TELEVISION, AND REFRIGERATION AND AIR CONDITIONING REPAIRMEN AND SERVICEMEN, (2) AUTOMOTIVE REPAIRMEN, MECHANICS, MACHINISTS, ETC., (3) BUILDING TRADES OCCUPATIONS, SUCH AS PLUMBERS, BRICKLAYERS, CARPENTERS, AND ELECTRICIANS, (4) DENTAL AND MEDICAL ASSISTANTS, LABORATORY WORKERS, AND TECHNICIANS, (5) FURNITURE REPAIRMEN AND UPHOLSTERERS, (6) COMMERCIAL COOKS AND BAKERS, (7) MEAT CUTTERS, (8) DRAFTSMEN, (9) NURSES' AIDS, (10) MACHINISTS AND SHEET METAL WORKERS, (11) WELDERS, AND (12) PRINTERS AND PUBLISHERS. TITLE, PUBLISHER, AND PRICE IS PROVIDED FOR EACH ITEM. A SEPARATE LIST OF PUBLISHERS' ADDRESSES IS ALSO INCLUDED. (AW)

INSTITUTION NAME: OKLAHOMA STATE BOARD OF VOCATIONAL AND TECHNICAL EDUCATION,  
STILLWATER. DIV. OF TRADE AND INDUSTRIAL EDUCATION.

ACCESSION NUMBERS:

VTC10517

88

PUBLICATION DATE: 68

TITLE: SUGGESTED GUIDELINES FOR DEVELOPING A HIGH SCHOOL TRADE AND INDUSTRIAL PROGRAM IN CARPENTRY.

DESCRIPTOR: \*PROGRAM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*CARPENTERS; BUILDING TRADES; \*GUIDELINES; PROGRAM ADMINISTRATION; \*PROGRAM DEVELOPMENT; GRADE 11; GRADE 12; ADVISORY COMMITTEES; REFERENCE MATERIALS; TEACHER CERTIFICATION

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 54P.

ISSUE: AIM SPRING1971

DEVELOPED BY STATE SUPERVISORS AS A GUIDELINE FOR ADMINISTRATORS, SUPERVISORS, AND TEACHERS PLANNING OR BUDGETING A PROGRAM, THE 2-YEAR PROGRAM IS DESIGNED TO PREPARE STUDENTS IN THE LAST 2 YEARS OF HIGH SCHOOL FOR APPRENTICESHIP PROGRAMS, POST-HIGH SCHOOL TRAINING OR SELF-EMPLOYMENT IN CARPENTRY. FOLLOWING A DESCRIPTION OF THE PHYSICAL FACILITIES AND EQUIPMENT NEEDED IN THE COURSE IS A TYPICAL COURSE OUTLINE INCLUDING UNITS OF INSTRUCTION, SKILLS TAUGHT, RELATED TECHNOLOGY, AND TEXTS AND REFERENCES. INFORMATION IS INCLUDED CONCERNING: (1) ADVISORY COMMITTEES, (2) PRELIMINARY PROGRAM APPROVAL, (3) TEACHER EDUCATION SERVICES, (4) INSTRUCTOR QUALIFICATION, (5) PROGRAMS FOR OBSERVATION, AND (6) VOCATIONAL INDUSTRIAL CLUBS OF AMERICA. RELATED DOCUMENTS ARE AVAILABLE AS VT 010 346-VT 010 348 AND VT 010 351-VT 010 356 (AIM WINTER 1970), AND VT 010 514-VT 010 516 AND VT 010 518 (IN THIS ISSUE). (GR)

AVAILABILITY: OHIO TRADE AND INDUSTRIAL EDUCATION SERVICE, INSTRUCTIONAL MATERIALS LABORATORY, THE OHIO STATE UNIVERSITY, 1885 NEIL AVENUE, COLUMBUS, OHIO 43210 (\$1.50).

INSTITUTION NAME: OHIO STATE DEPT. OF EDUCATION, COLUMBUS. TRADE AND INDUSTRIAL EDUCATION SERVICE.

ACCESSION NUMBERS:

VTC10469

89

PUBLICATION DATE: 67

TITLE: BASIC ESTIMATING FOR MASONRY.

PERSONAL AUTHOR: HEPPA, VICTOR

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*INSTRUCTIONAL MATERIALS;  
\*BRICKLAYERS; BUILDING TRADES; \*ESTIMATED COSTS; BRICKLAYING; MASONRY; SKILLED  
OCCUPATIONS; CONSTRUCTION COSTS; \*EELS; CONSTRUCTION INDUSTRY

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 118P.

ISSUE: AIM SUMMER1970

THIS GUIDE IS DESIGNED TO TEACH THE STUDENT SOME OF THE BASIC ESTIMATING  
TECHNIQUES NEEDED IN THE MASONRY TRADE. SEVEN PLAN SHEETS WITH 26 VARIATIONS ARE  
THE BASIS FOR GRADUATED ASSIGNMENTS USING ONE OR MORE INFORMATION SHEETS  
CONTAINING SPECIFIC OBJECTIVES AND INFORMATION FOR THE FOLLOWING MAJOR TOPICS:  
(1) FOOTINGS, FOUNDATIONS AND CONCRETE FLOORS, (2) FACE BRICK AND COMMON BRICK  
WALLS, (3) BRICK BONDS WITH HEADER COURSES, (4) PARTITIONS, (5) IRREGULARLY  
SHAPED BUILDINGS, (6) CEMENT AND SAND FOR MORTAR, (7) STONE VENEER, (8) BRICK OR  
STONE WALLS BACKED WITH BLOCKS, (9) BONDED BRICK AND BLOCK WALLS, (10) GLASS  
BLOCKS, (11) GLAZED FACING TILE, AND (12) CAVITY WALLS. A TABLE OF QUANTITIES IS  
APPENDED. (GR)

AVAILABILITY: VOCATIONAL-TECHNICAL CURRICULUM LABORATORY, RUTGERS UNIVERSITY,  
10 SEMINARY PLACE, NEW BRUNSWICK, NEW JERSEY 08903 (\$1.50).

INSTITUTION NAME: BERGEN COUNTY VOCATIONAL AND TECHNICAL HIGH SCHOOL,  
HACKENSACK, N.J.; RUTGERS, THE STATE UNIV., NEW BRUNSWICK, N.J. CURRICULUM LA

ACCESSION NUMBERS:

VTG10347

90

PUBLICATION DATE: 68

TITLE: SUGGESTED GUIDELINES FOR DEVELOPING A HIGH SCHOOL TRADE AND INDUSTRIAL PROGRAM IN CONSTRUCTION ELECTRICIAN.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICIANS; BUILDING TRADES; \*PROGRAM GUIDES; \*PROGRAM ADMINISTRATION; ELECTRICAL OCCUPATIONS; FACILITY GUIDELINES; PROGRAM DESCRIPTIONS; EQUIPMENT STANDARDS; COURSE CONTENT; GRADE 11; GRADE 12; ADVISORY COMMITTEES; TEACHER CERTIFICATION; CLUBS

IDENTIFIER: VOCATIONAL INDUSTRIAL CLUBS OF AMERICA; VICA

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 70P.

ISSUE: AIM WINTER1970

THIS SUGGESTED GUIDELINE FOR DEVELOPING A HIGH SCHOOL TRADE AND INDUSTRIAL PROGRAM IN CONSTRUCTION ELECTRICIAN WAS DEVELOPED BY STATE SUPERVISORS FOR ADMINISTRATORS, SUPERVISORS, AND TEACHERS WHO ARE PLANNING A PROGRAM OR DESIGNING A BUDGET FOR CONSTRUCTION ELECTRICIANS. INCLUDED ARE: (1) PURPOSE OF TRADE AND INDUSTRIAL EDUCATION, (2) DESCRIPTION OF THE CONSTRUCTION ELECTRICIAN PROGRAM, (3) EDUCATIONAL SPECIFICATIONS FOR CONSTRUCTION ELECTRICIANS, (4) LABORATORY AND EQUIPMENT LAYOUT, (5) LIST OF EQUIPMENT, (6) OPERATING BUDGET, (7) COURSE LENGTH, CLASS SIZE AND REIMBURSEMENT, (8) SALARY, (9) TIME SCHEDULE, (10) TYPICAL COURSE CONTENT--11TH AND 12TH GRADES, (11) SUGGESTED TEXTS AND REFERENCES, (12) SUGGESTED LIST OF FILMS, (13) ADVISORY COMMITTEES, (14) PRELIMINARY PROGRAM APPROVAL, (15) TEACHER EDUCATION SERVICES, (16) CERTIFICATION OF INSTRUCTORS, AND (17) VOCATIONAL INDUSTRIAL CLUBS OF AMERICA. RELATED DOCUMENTS ARE AVAILABLE AS VI 010 346, VT 010 348, AND VT 010 351-VT G10 356 (ALL IN THIS ISSUE). (GR)

AVAILABILITY: OHIO TRADE AND INDUSTRIAL EDUCATION SERVICE, INSTRUCTIONAL MATERIALS LABORATORY, THE OHIO STATE UNIVERSITY, 1885 NEIL AVENUE, COLUMBUS, OHIO 43210 (\$1.50).

INSTITUTION NAME: OHIO STATE DEPT. OF EDUCATION, COLUMBUS. TRADE AND INDUSTRIAL EDUCATION SERVICES.

ACCESSION NUMBERS: VT010236

91

PUBLICATION DATE: NOV68

TITLE: TRAINING RECOMMENDATIONS: APPRENTICE FLOOR AND WALL TILER.

DESCRIPTOR: \*PROGRAM CONTENT; CURRICULUM GUIDES; PROGRAM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON-THE-JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; FLOOR LAYERS

IDENTIFIER: \*IRELAND; WALL TILERS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 21P.

ISSUE: AIM SUMMER1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE GIVES RECOMMENDATIONS FOR TRAINING APPRENTICE FLOOR AND WALL TILERS. BRIEFLY DESCRIBED ARE OBJECTIVES, INDUCTION, ON- AND OFF-THE-JOB TRAINING, FURTHER EDUCATION, ELEMENTS OF CRAFT TRAINING, JOB DESCRIPTIONS, AND GRANTS. PRINCIPAL FEATURE OF THE GUIDE IS AN OUTLINE OF THE BASIC SKILLS COURSE FOR OFF-THE-JOB TRAINING, LISTING OPERATIONS TO BE PERFORMED, KNOWLEDGE REQUIRED, AND SKILLS INVOLVED. HINTS ON INTERVIEWING, A SAMPLE APPLICATION FORM, PERSONAL SPECIFICATIONS OF TRAINEES, AND GENERAL INFORMATION ON SELECTION AND RECRUITMENT ARE APPENDED. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VTC10235

92

PUBLICATION DATE: NOV68

TITLE: TRAINING RECOMMENDATIONS: SCAFFOLDERS.

DESCRIPTOR: CURRICULUM GUIDES; \*PROGRAM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY

IDENTIFIER: \*IRELAND; SCAFFOLDERS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 1RP.

ISSUE: AIM FALL1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR THE BUILDING TRADES OCCUPATION OF SCAFFOLDER. THIS GUIDE FOR TRAINING SCAFFOLDERS INCLUDES: (1) AN OUTLINE OF THE TRAINING PROGRAM, INCLUDING ASPECTS OF TRAINING, LENGTH OF TIME RECOMMENDED FOR EACH ASPECT, AND GENERAL INFORMATION, AND (2) BASIC SKILLS COURSES FOR BEGINNING AND ADVANCED SCAFFOLDERS AND SCAFFOLDER CHARGE-HANDS, LISTING SKILLS AND ABILITIES TO BE ACQUIRED IN EACH COURSE. OBJECTIVES, RECRUITMENT, ON- AND OFF-THE-JOB TRAINING, INDUCTION, TRAINING RECORDS, JOB DESCRIPTION, AND GRANTS ARE ALSO COVERED BRIEFLY. INTERVIEWING HINTS AND PERSONAL TRAINEE QUALIFICATIONS ARE APPENDED. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VTQ10234

93

PUBLICATION DATE: NOV68

TITLE: TRAINING RECOMMENDATIONS: APPRENTICE PLASTERER.

DESCRIPTOR: \*PROGRAM CONTENT; PROGRAM GUIDES; CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON-THE-JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY

IDENTIFIER: \*IRELAND; PLASTERERS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 17P.

ISSUE: AIM SUMMER1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE RELATES TO TRAINING OF APPRENTICE PLASTERERS. THE PROGRAM INCLUDES OUTLINES OF: (1) THE OVERALL TRAINING PROGRAM, SPECIFYING YEAR OF TRAINING, ON-THE-JOB TRAINING, OFF-THE-JOB TRAINING, AND FURTHER EDUCATION, AND (2) BASIC SKILLS COURSE FOR OFF-THE-JOB TRAINING, INCLUDING OPERATIONS TO BE PERFORMED AND BASIC SKILLS AND KNOWLEDGE INVOLVED. OBJECTIVES, RECRUITMENT, INDUCTION, FURTHER EDUCATION, TRAINING RECORDS, JOE DESCRIPTION, AND GRANTS ARE ALSO COVERED BRIEFLY. PERSONAL SPECIFICATIONS OF TRAINEES, INTERVIEWING HINTS, AND A SAMPLE APPLICATION FORM ARE APPENDED. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VT010227

94

PUBLICATION DATE: JAN68

TITLE: TRAINING RECOMMENDATIONS: BUILDING TECHNICIANS.

DESCRIPTOR: \*CURRICULUM GUIDES; \*PROGRAM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY

IDENTIFIER: \*IRELAND

EDPS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 18P.

ISSUE: AIM SUMMER1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE PRESENTS RECOMMENDATIONS FOR BUILDING TECHNICIANS. PRINCIPAL TOPICS COVERED ARE: (1) THE NEED FOR GOOD STAFF, (2) RECRUITMENT, (3) DETAILS OF TRAINING PLAN, (4) INDUCTION TRAINING, (5) TRAINING ON-THE-JOB, (6) TRAINING IN THE TECHNICAL COLLEGE, AND (7) WORK BOOK. INTERVIEWING HINTS ARE APPENDED. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VT010226

95

PUBLICATION DATE: NOV68

TITLE: TRAINING RECOMMENDATIONS: APPRENTICE CARPENTER AND JOINER.

DESCRIPTOR: \*PROGRAM GUIDES; CARPENTERS; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; CURRICULUM GUIDES

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 25P.

ISSUE: AIM SUMMER1970

THIS GUIDE IS ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR THE BUILDING TRADES OCCUPATIONS OF APPRENTICE CARPENTERS AND JOINERS. CONTENTS COVER: (1) INTRODUCTION, (2) TRAINING RECOMMENDATIONS, (3) OBJECTIVES OF RECOMMENDATIONS, (4) RECRUITMENT, (5) INDUCTION, (6) "OFF-THE-JOB" TRAINING, (7) "ON-THE-JOB" TRAINING, (8) ASSOCIATED FURTHER EDUCATION, (9) ESSENTIAL ELEMENTS IN CRAFT TRAINING, (10) RECORDS OF TRAINING, (11) GRANTS, (12) JOB DESCRIPTION, AND (13) THE TRAINING PROGRAMME. OUTLINES OF BASIC SKILLS COURSE, PARTS I, II, AND III, LISTING OPERATIONS TO BE PERFORMED AND SKILLS AND KNOWLEDGE TO BE OBTAINED ARE APPENDED, AS WELL AS INFORMATION ON SELECTION AND RECRUITMENT, PERSONAL SPECIFICATIONS, INTERVIEWING HINTS, AND A SAMPLE APPLICATION FORM. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VTO10225

96

PUBLICATION DATE: LEC67

TITLE: TRAINING OF GENERAL FOREMEN: INTERIM RECOMMENDATIONS.

DESCRIPTOR: \*PROGRAM GUIDES; CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; SUPERVISORS

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 12P.

ISSUE: AIM SUMMER1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE DEALS WITH RECOMMENDATIONS FOR TRAINING GENERAL FOREMEN. PRINCIPAL FEATURES ARE: (1) INTRODUCTORY INFORMATION, (2) DUTIES AND RESPONSIRILITIES OF FOREMEN, (3) RECRUITMENT, (4) GENERAL TRAINING, (5) INDUCTION TRAINING, (6) OFF-THE-JOB TRAINING, AND (7) ON-THE-JOB TRAINING. (AW))

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBER: VT010224

97

PUBLICATION DATE: JUN67

TITLE: TRAINING RECOMMENDATIONS: ELECTRICAL INSTALLATION APPRENTICES.

DESCRIPTOR: \*PROGRAM GUIDES; CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON-THE-JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; ELECTRICIANS

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 31P.

ISSUE: AIM SUMMER1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE PRESENTS RECOMMENDATIONS FOR TRAINING ELECTRICAL INSTALLATION APPRENTICES. PRINCIPAL FEATURES OF THE GUIDE ARE TWO SUGGESTED TRAINING PLAN OUTLINES, THE FIRST SPREADING THE OFF-THE-JOB TRAINING COURSE OVER A 3-YEAR PERIOD, (THREE 14-WEEK PERIODS) AND THE SECOND CONSOLIDATING THE THREE SECTIONS INTO A 1-YEAR, 40-WEEK PROGRAM. BOTH PLANS LIST PRACTICAL WORK TO BE DONE AND KNOWLEDGE AND SKILLS TO BE ACQUIRED. TECHNICAL TRAINING IN THE ELECTRICAL CONTRACTING INDUSTRY AND THE ON-THE-JOB TRAINING PROGRAM ARE ALSO PROVIDED. GENERAL INFORMATION SUCH AS JOB DESCRIPTION, PURPOSE, AND RECRUITMENT ARE COVERED BRIEFLY. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VTC10223

98

PUBLICATION DATE: JUN67

TITLE: TRAINING RECOMMENDATIONS: APPRENTICE PLUMBERS.

DESCRIPTOR: \*PROGRAM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; CURRICULUM GUIDES; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; PLUMBING

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SFT.

DESCRIPTIVE NOTE: 17P.

ISSUE: AIM FALL1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE FOR APPRENTICE PLUMBERS FEATURES: (1) GENERAL INFORMATION, (2) OBJECTIVES OF THE PROGRAM, (3) JOB DESCRIPTION, (4) TIPS ON RECRUITMENT AND SELECTION OF APPRENTICES, (5) INDUCTION TRAINING SUGGESTIONS, (6) AN OUTLINE OF THE TRAINING PROGRAM, AND (7) INFORMATION ON GRANTS. APPENDICES INCLUDE AN OUTLINE OF SKILLS AND OPERATIONS TO BE TAUGHT IN ON-THE-JOB TRAINING, A SAMPLE APPLICATION FORM, HINTS ON INTERVIEWING, AND A BASIC OUTLINE FOR FIRST YEAR "OFF-THE-JOB" TRAINING. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS: VT010222

99

PUBLICATION DATE: JUN67

TITLE: TRAINING RECOMMENDATIONS: APPRENTICE PAINTERS.

DESCRIPTOR: \*PROGRAM GUIDES; CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; IN THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; PAINTING

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 12P.

ISSUE: AIM SUMMER1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE FOR APPRENTICE PAINTERS PRESENTS AN OUTLINE OF A 25-WEEK BASIC SKILLS COURSE TO BE FOLLOWED IN THE FIRST YEAR OF APPRENTICESHIP, AND A 9-WEEK OUTLINE FOR THE SECOND, THIRD, OR FOURTH YEARS. BASIC SKILLS TO BE DEVELOPED, TRAINING NECESSARY, AND APPROXIMATE LENGTH OF TIME (IN WEEKS) TO BE SPENT ON EACH ITEM ARE GIVEN. OTHER FEATURES OF THE PROGRAM, BRIEFLY COVERED, ARE THE PURPOSE, OBJECTIVES, JOB DESCRIPTION, RECRUITMENT, SELECTION, TRAINING, INDUCTION, FURTHER EDUCATION, SUPERVISION, GRANTS, AND ON- AND OFF-THE-JOB TRAINING. A SAMPLE APPLICATION FORM IS APPENDED. (AK)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VTC10221

100

PUBLICATION DATE: JAN62

TITLE: TRAINING RECOMMENDATIONS: HEATING AND VENTILATING APPRENTICES.

DESCRIPTOR: \*PROGRAM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS;  
\*FOREIGN COUNTRIES; CURRICULUM GUIDES; ON THE JOB TRAINING; \*BUILDING TRADES;  
ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; HEATING; VENTILATION

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 12P.

ISSUE: AIM SUMMER 1970

THIS GUIDE, ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, IS CONCERNED WITH RECOMMENDATIONS FOR TRAINING APPRENTICES IN HEATING AND VENTILATING. THE PRINCIPAL FEATURE OF THE GUIDE IS THE SYLLABUS AND TRAINING PROGRAM, OUTLINING A 4-YEAR TECHNICAL COLLEGE AND INDUSTRIAL TRAINING EXPERIENCE. OTHER FEATURES COVERED BRIEFLY ARE PURPOSE, OBJECTIVES, OCCUPATIONAL DESCRIPTION, RECRUITMENT, AND INDUCTION TRAINING. A SAMPLE APPLICATION FORM AND HINTS ON INTERVIEWING ARE APPENDED. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VT010220

101

PUBLICATION DATE: JAN68

TITLE: TRAINING RECOMMENDATIONS: HEATING AND VENTILATING TECHNICIANS.

DESCRIPTOR: \*PROGRAM GUIDES; CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; HEATING; VENTILATION; SUBPROFESSIONALS

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 11P.

ISSUE: AIM SUMMER1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE RELATES TO HEATING AND VENTILATING TECHNICIANS. CONTENT HEADINGS ARE: (1) INTRODUCTION, (2) RECRUITMENT, (3) JOB SPECIFICATION, (4) KNOWLEDGE REQUIRED BY TECHNICIANS, (5) TRAINING PROGRAMME, (6) DETAIL OF TRAINING, (7) GRANTS, AND (8) CONCLUSION. THE SECTION ON DETAIL OF TRAINING PROVIDES SUBJECT REQUIREMENTS FOR BOTH JUNIOR AND SENIOR TECHNICIANS. INTRODUCING HINTS ARE APPENDED. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VT01C219

102

PUBLICATION DATE: JAN68

TITLE: TRAINING RECOMMENDATIONS: CIVIL ENGINEERING TECHNICIANS.

DESCRIPTOR: \*PROGRAM GUIDES; CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; ENGINEERING TECHNICIANS; CIVIL ENGINEERING

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 17P.

ISSUE: AIM FALL1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE IS DESIGNED TO AID IN TRAINING CIVIL ENGINEERING TECHNICIANS. PRINCIPAL FEATURES OF THE PROGRAM ARE DETAILED DESCRIPTIONS OF: (1) ON-THE-JOB TRAINING, INCLUDING A DETAILED OUTLINE LISTING SUBJECTS TO BE COVERED, YEAR AND QUARTER OF STUDY, AND POSITION OF INSTRUCTOR, AND (2) TECHNICAL COLLEGE TRAINING, GIVING ENTRY REQUIREMENTS, SUBJECTS TO BE COVERED EACH YEAR, AND INFORMATION ON CERTIFICATION FOR VARIOUS LEVELS OF TRAINING. RECRUITMENT, OCCUPATIONAL DESCRIPTION, INDUCTION TRAINING AND OTHER GENERAL INFORMATION ARE COVERED BRIEFLY. INTERVIEWING HINTS ARE APPENDED. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VTC10218

103

PUBLICATION DATE: NOV68

TITLE: TRAINING RECOMMENDATIONS: APPRENTICE ROOF SLATER AND TILER.

DESCRIPTOR: \*PROGRAM GUIDES; CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; ROOFERS

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 17P.

ISSUE: AIM WINTER 1970

THIS GUIDE IS ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS. PRINCIPAL FEATURE OF THIS PROGRAM FOR APPRENTICE ROOF SLATERS AND TILERS IS A TOPICAL OUTLINE OF THE BASIC COURSE FOR "OFF-THE-JOB" TRAINING, INCLUDING OPERATIONS TO BE PERFORMED, SKILLS INVOLVED, AND KNOWLEDGE REQUIRED. TOPICS COVERED IN THE OUTLINE ARE: (1) SLATING, (2) TILING, (3) SHINGLES, (4) SETTING AND FIXING FLASHINGS, (5) SETTING AND FIXING RIDGE, VERGE AND HIP COVERINGS, AND (6) MAINTENANCE OF RAIN-WATER FITTINGS. ALSO COVERED BRIEFLY IN THE GUIDE ARE OBJECTIVES, RECRUITMENT, INDUCTION, CN- AND OFF-THE-JOB TRAINING, FURTHER EDUCATION, CRAFT TRAINING, TRAINING RECORDS, JOB DESCRIPTIONS, AND GRANTS. ADDITIONAL INFORMATION ON SELECTION AND RECRUITMENT, PERSONAL QUALIFICATIONS OF TRAINEES, INTERVIEWING HINTS, AND A SAMPLE APPLICATION FORM ARE APPENDED. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND).

ACCESSION NUMBERS:

VT016217

104

PUBLICATION DATE: NOV66

TITLE: TRAINING RECOMMENDATIONS: APPRENTICE CONSTRUCTIONAL STEEL FABRICATOR.

DESCRIPTOR: \*PROGRAM GUIDES; CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 24P.

ISSUE: AIM FALL1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THE MAIN FEATURE OF THIS GUIDE FOR APPRENTICE CONSTRUCTIONAL STEEL FABRICATORS IS A TOPICAL OUTLINE OF A 2-YEAR BASIC SKILLS COURSE FOR "OFF-THE-JOB" TRAINING, WHICH INCLUDES OPERATIONS TO BE PERFORMED, SKILLS TO BE ACQUIRED, AND KNOWLEDGE TO BE GAINED. TOPICS COVERED ARE: (1) READING DRAWINGS AND SPECIFICATIONS, (2) TEMPLATE MAKING AND SETTING OUT, (3) PREPARATION OF STRUCTURAL STEEL MEMBERS, (4) ASSEMBLY, AND (5) PROTECTING STEEL AGAINST CORROSION. OBJECTIVES, RECRUITMENT, INDUCTION, ASSOCIATED EDUCATION, CRAFT TRAINING, TRAINING RECORDS, AND GRANTS ARE DISCUSSED BRIEFLY. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VTC10216

105

PUBLICATION DATE: NOV68

TITLE: TRAINING RECOMMENDATIONS: BUILT-UP ROOFING.

DESCRIPTOR: \*PROGRAM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; CURRICULUM GUIDES; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; ROOFERS

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 24P.

ISSUE: AIM FALL1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE PRESENTS RECOMMENDATIONS FOR TRAINING ROOFERS. PRINCIPAL FEATURES OF THE PROGRAM ARE OUTLINES OF BASIC SKILLS COURSES FOR BOTH THE "LEARNER" AND "IMPROVER" TRAINEE, LISTING THE KNOWLEDGE REQUIRED AND THE OPERATIONS AND SKILLS INVOLVED. THE ENTIRE TRAINING PROGRAM, INCLUDING VARIOUS ASPECTS OF TRAINING, DURATION OF TRAINING TIME FOR EACH ASPECT, AND GENERAL INFORMATION CONCERNING EACH ASPECT OF TRAINING IS ALSO OUTLINED. A DETAILED JOB DESCRIPTION, OBJECTIVES, RECRUITMENT, INDUCTION, TRAINING RECORDS, AND GRANTS ARE COVERED BRIEFLY. APPENDIXES PROVIDE ADDITIONAL INFORMATION ON SELECTION AND RECRUITMENT, PERSONAL QUALIFICATIONS OF TRAINEES, INTERVIEWING HINTS, AND A SAMPLE APPLICATION FORM. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS: VT010215

106

PUBLICATION DATE: NOV68

TITLE: TRAINING RECOMMENDATIONS: APPRENTICE BRICKLAYER.

DESCRIPTOR: \*PROGRAM GUIDES; CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; BRICKLAYERS

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 22P.

ISSUE: AIM FALL1970

ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS, THIS GUIDE RELATES TO APPRENTICE BRICKLAYERS. PRINCIPAL FEATURE OF THE PROGRAM IS A TOPICAL OUTLINE OF A BASIC SKILLS COURSE FOR "OFF-THE-JOB" TRAINING, INCLUDING OPERATIONS TO BE PERFORMED, AND SKILLS AND KNOWLEDGE TO BE ACQUIRED. PART I OF THE THREE-PART COURSE OUTLINE COVERS HAND TOOLS, MORTAR, FOUNDATIONS, BRICK WALLING, AND PARTITIONS; PART II OUTLINES FORMATION AND BRIDGING OF OPENINGS, FIREPLACES, AND REINFORCED BRICKWORK; AND PART III DEALS WITH FOUNDATIONS, DRAINAGE, CLADDING, AND DECORATIVE AND FUNCTIONAL FEATURES. GENERAL INFORMATION ON THE PROGRAM, SUCH AS RECRUITMENT, TRAINING RECORDS AND JOB DESCRIPTION IS PRESENTED BRIEFLY, AND INTERVIEWING HINTS, A SAMPLE APPLICATION, AND PERSONAL TRAINEE QUALIFICATIONS ARE APPENDED. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VTO10214

107

PUBLICATION DATE: AUG69

TITLE: TRAINING RECOMMENDATIONS: PLUMBING TECHNICIAN.

DESCRIPTOR: \*PROGRAM CONTENT; CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*FOREIGN COUNTRIES; ON THE JOB TRAINING; \*BUILDING TRADES; ADULT VOCATIONAL EDUCATION; CONSTRUCTION INDUSTRY; PLUMBING; SUBPROFESSIONALS

IDENTIFIER: \*IRELAND

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 17P.

ISSUE: AIM SUMMER1970

THIS GUIDE IS ONE OF A SERIES PREPARED BY THE CONSTRUCTION INDUSTRY TRAINING BOARD TO PROVIDE TRAINING RECOMMENDATIONS FOR BUILDING TRADES OCCUPATIONS. PRINCIPAL FEATURES OF THIS GUIDE FOR PLUMBING TECHNICIANS ARE AN OUTLINE OF THE TRAINING PROGRAM LISTING TYPE OF TRAINING, PLANNED OFFICE EXPERIENCE, PRACTICAL ON-SITE EXPERIENCE, AND RECOMMENDED FURTHER EDUCATION, AND A SAMPLE TIMETABLE OF THE TRAINING PROGRAM CORRELATING THE OPERATIONS PERFORMED, WEEKS SPENT ON SITE AND IN THE OFFICE, AND FURTHER EDUCATION. RECRUITMENT, JOB DESCRIPTION, TRAINING DESCRIPTIONS, AND INFORMATION ON FURTHER EDUCATION, TRAINING RECORDS, AND GRANTS ALSO ARE COVERED BRIFFLY. PERSONAL SPECIFICATIONS, INTERVIEWING HINTS, AND A SAMPLE APPLICATION FORM ARE APPENDED. (AW)

INSTITUTION NAME: CONSTRUCTION INDUSTRY TRAINING BOARD, BELFAST (NORTHERN IRELAND)

ACCESSION NUMBERS:

VTC1014C

108

PROGRAM AREA: 08

PUBLICATION DATE: 69

TITLE: CONCRETE IN THE FIELD-I; INSTRUCTOR'S GUIDE; PILOT PROGRAM EDITION.

DESCRIPTOR: \*TEACHING GUIDES; \*CEMENT INDUSTRY; \*TRADE AND INDUSTRIAL EDUCATION; POST SECONDARY EDUCATION; INSTRUCTIONAL MATERIALS; \*PILOT PROJECTS; EDUCATIONAL PROGRAMS; \*TECHNICAL EDUCATION

IDENTIFIER: PORTLAND CEMENT ASSOCIATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 597P.

ISSUE: AIM SPRING1970

THIS GUIDE, PREPARED FOR A 2-YEAR COURSE IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES, IS DESIGNED TO BE A NATIONAL PROGRAM TO TRAIN PERSONS FOR EMPLOYMENT AS TECHNICIANS IN THE CEMENT AND CONCRETE INDUSTRIES. INCLUDED ARE 48 SESSION OUTLINES DIVIDED INTO FIVE UNITS OF STUDY. EACH UNIT CONTAINS OBJECTIVES, OUTLINES, RELATED INFORMATION, AND ILLUSTRATIONS. UNIT 5 INCLUDES INTRODUCTION, AND HANDLING OF CONCRETE-TRANSPORTING AND CONCRETE-PLACING. UNIT 6 INCLUDES TOOLS AND EQUIPMENT FOR FINISHING CONCRETE, FINISHING OF CONCRETE, AND REVIEW AND MID-TERM EXAM (NOT SUPPLIED). UNIT 7 INCLUDES JOINTING OF CONCRETE AND VOLUME CHANGES AND CRACK CONTROL. UNIT 8 INCLUDES SOIL-CEMENT. UNIT 9 INCLUDES FIRE RESISTANCE OF CONCRETE AND REVIEW AND FINAL EXAM (NOT SUPPLIED). EACH SESSION INCLUDES GENERAL OBJECTIVES, PERFORMANCE OBJECTIVES, INTRODUCTION, OVERVIEW OF SESSION, SESSION OUTLINE, RELATED ACTIVITIES, TOOLS AND MATERIALS, PRESENTATION OUTLINE, TEACHING TECHNIQUES, AIDS AND DEVICES, RELATED INFORMATION, AND DISCUSSION QUESTIONS. A GLOSSARY IS APPENDED. THIS GUIDE AND RELATED DOCUMENTS (VT 010 139, VT 010 141, AND VT 010 150-VT 010 152, ALL IN THIS ISSUE) ARE CURRENTLY BEING FIELD TESTED PRIOR TO REVISION AND SHOULD BE AVAILABLE IN REVISED FORM BY LATE 1972. (GR)

GRANT NUMBER: OEG-6-8-080042-3667(085)

BUREAU NUMBER: BR-8-C042

AVAILABILITY: PORTLAND CEMENT ASSOCIATION, 601 ROCKWELL AVENUE, CLEVELAND, OHIO 44114.

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, CLEVELAND, OHIO; NATIONAL READY MIXED CEMENT ASSOCIATION, CHICAGO; NATIONAL READY

ACCESSION NUMBERS: VT010139

109

PROGRAM AREA: OF

PUBLICATION DATE: 69

TITLE: LABORATORY MANUAL (FOR CONCRETE INSTRUCTION COURSE); INSTRUCTOR'S GUIDE,  
PILOT PROGRAM EDITION.

DESCRIPTOR: \*CEMENT INDUSTRY; \*TECHNICAL EDUCATION; \*TRADE AND INDUSTRIAL  
EDUCATION; INSTRUCTIONAL MATERIALS; INSTRUCTIONAL PROGRAMS; \*PILOT PROJECTS;  
EDUCATIONAL PROGRAMS; POST SECONDARY EDUCATION; \*TEACHING GUIDES

IDENTIFIER: PORTLAND CEMENT ASSOCIATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 641P.

ISSUE: AIM SPRING1970

THIS LABORATORY MANUAL, PREPARED FOR A 2-YEAR PROGRAM IN JUNIOR COLLEGES AND  
TECHNICAL INSTITUTES, IS DESIGNED TO ACCOMPANY THE INSTRUCTIONAL MATERIALS TO  
TRAIN PERSONS FOR EMPLOYMENT AS TECHNICIANS IN THE CEMENT AND CONCRETE  
INDUSTRIES. INCLUDED ARE 16 LABORATORY ASSIGNMENTS FOR EACH OF THE FOLLOWING:  
(1) PRINCIPLES OF CONCRETE, (2) CONCRETE IN THE FIELD-I, (3) CONCRETE IN THE  
FIELD-II, AND SPECIAL CONCRETES AND FIELD PROBLEMS. ASTM STANDARDS RELATED TO  
THE USE OF CEMENT AND CONCRETE, AND LABORATORY EQUIPMENT LISTS ARE APPENDED.  
THIS MANUAL AND RELATED MATERIALS ARE CURRENTLY BEING FIELD TESTED PRIOR TO  
REVISION AND SHOULD BE AVAILABLE IN REVISED FORM BY LATE 1972. RELATED DOCUMENTS  
ARE AVAILABLE AS VT 010 140, VT 010 141 AND VT 010 150-VT 010 152, ALL IN THIS  
ISSUE. (GR)

GRANT NUMBER: DEG-0-B-080042-3667(085)

BUREAU NUMBER: BR-8-0042

AVAILABILITY: PORTLAND CEMENT ASSOCIATION, 601 ROCKWELL AVENUE, CLEVELAND, OHIO  
44114.

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, CLEVELAND, OHIO; NATIONAL READY  
MIXED CONCRETE ASSOCIATION; NATIONAL READY MI

ACCESSION NUMBERS:

VT010031

110

PUBLICATION DATE: 63

TITLE: BUILDING TRADES; SUGGESTED BASIC COURSE OUTLINE.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*BUILDING TRADES; BRICKLAYING;  
CABINETMAKING; PAINTING; PLUMBING; \*CURRICULUM GUIDES; TEACHING GUIDES;  
INSTRUCTIONAL MATERIALS; CARPENTERS; \*SKILLED OCCUPATIONS; BIBLIOGRAPHIES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: SOP.

ISSUE: AIM SPRING1976

THIS COURSE GUIDE WAS DEVELOPED BY A SPECIAL WORKSHOP COMMITTEE FOR TEACHER USE.  
IN COURSE AND LESSON PLANNING. THE COURSE CONTENT, DESIGNED FOR A 2-YEAR PERIOD,  
INCLUDES: (1) PLANNING INSTRUCTIONAL PROJECTS, (2) BLUEPRINT READING, (3)  
CARPENTRY, (4) PAINTING AND DECORATING, (5) PLUMBING, (6) BRICKLAYING, (7)  
ELECTRICAL WIRING, AND (8) CABINETS AND MILL WORK. TEACHING SUGGESTIONS AND  
INFORMATION SOURCES ARE PROVIDED FOR EACH TOPIC. A BIBLIOGRAPHY, FILM LIST, TOOL  
AND EQUIPMENT LIST, AND A SUGGESTED SHOP LAYOUT ARE APPENDED. (GR)

AVAILABILITY: INSTRUCTIONAL MATERIALS PRODUCTION, ENGINEERING EXTENSION  
SERVICE, TEXAS A AND M UNIVERSITY, F.E. DRAWER K, COLLEGE STATION, TEXAS 77843  
(\$1.00).

INSTITUTION NAME: TEXAS A AND M UNIV., COLLEGE STATION. ENGINEERING EXTENSION  
SERVICE

SPONSORING AGENCY NAME: TEXAS EDUCATION AGENCY, AUSTIN

ACCESSION NUMBERS:

VTC10019

111

PUBLICATION DATE: 66

TITLE: CONCRETE MANUAL; A MANUAL FOR THE CONTROL OF CONCRETE CONSTRUCTION.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*CEMENT INDUSTRY; \*INSTRUCTIONAL MATERIALS; MANUALS; SUPPLEMENTARY TEXTBOOKS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 675P.

ISSUE: AIM SPRING1970

THIS SEVENTH EDITION OF THE CONCRETE MANUAL CONTAINS FOR THE FIRST TIME INFORMATION ON PRESTRESSED CONCRETE, ELASTIC FRACTIONATION, HYDRAULIC JIGGING, DESCRIPTION OF WATER-REDUCING, SET-RETARDING ADMIXTURES, MORTAR LINING AND COATING TO STEEL PIPE, AND OTHER UP-TO-DATE USES OF CONCRETE. THE MANUAL IS DIVIDED INTO EIGHT CHAPTERS: (1) CONCRETE AND CONCRETE MATERIALS, (2) INVESTIGATION AND SELECTION OF CONCRETE MATERIALS, (3) CONCRETE MIXES, (4) INSPECTION, FIELD LABORATORY FACILITIES, AND REPORTS, (5) CONCRETE MANUFACTURING, (6) HANDLING, PLACING, FINISHING, AND CURING, (7) REPAIR AND MAINTENANCE OF CONCRETE, AND (8) SPECIAL TYPES OF CONCRETE AND MORTAR. VARIOUS CONCRETE TEST DESCRIPTIONS, A REFERENCE LIST OF INSPECTION ITEMS, AND A SELECTED BIBLIOGRAPHY ARE APPENDED. (GR)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (I27.19/2:C74/966, \$3.25).

INSTITUTION NAME: DEPARTMENT OF THE INTERIOR, WASHINGTON, D.C. BUREAU OF RECLAMATION

ACCESSION NUMBERS:

VTC10016

112

PUBLICATION DATE: 68

TITLE: HIGHWAY DESIGN AND ESTIMATING: TEACHER'S GUIDE FOR UNIT VI OF PROGRAM FOR HIGHWAY TECHNICIANS.

DESCRIPTOR: \*TEACHING GUIDES; CURRICULUM GUIDES; \*ADULT VOCATIONAL EDUCATION; \*TECHNICAL EDUCATION; \*CIVIL ENGINEERING; \*TRANSPORTATION; ROAD CONSTRUCTION

EDRS PRICE: MF AVAILABLE IN VT-FRIC SET.

DESCRIPTIVE NOTE: 230P.

ISSUE: AIM SUMMER1970

THIS TEACHER'S GUIDE IS ONE OF A SERIES IN THE HIGHWAY TECHNICIANS PROGRAM WHICH WAS DEVELOPED THROUGH COOPERATION BETWEEN THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION AND THE STATE EDUCATION DEPARTMENT. THE SERIES OF NINE COURSES IS INTENDED TO PROVIDE FUNDAMENTAL INFORMATION TO PREPARE STUDENTS IN AN ADULT EDUCATION SETTING FOR WORK IN HIGHWAY PLANNING, DESIGN, CONSTRUCTION, AND MAINTENANCE. LESSONS DEAL WITH: (1) SEQUENCE OF DESIGN, (2) HIGHWAY CLASSIFICATION, (3) FEATURES OF DESIGN, (4) HORIZONTAL ALIGNMENT, (5) VERTICAL ALIGNMENT, (6) TYPICAL SECTIONS AND STANDARD STRUCTURE SHEETS, (7) GEOMETRIC AUXILIARIES, (8) THE ENGINEER'S ESTIMATE, AND (9) REPORT ON DESIGN AND ESTIMATE. OBJECTIVES FOR EACH LESSON ARE FOLLOWED BY A FORMAT OF TWO PARALLEL COLUMNS HEADED "CONTENT OUTLINE" AND "TEACHING POINTS AND TECHNIQUES." THE TOTAL TIME ALLOTMENT IS 38 HOURS. THE TEACHER SHOULD BE AN EXPERIENCED HIGH WAY ENGINEER WITH SPECIALIZED BACKGROUND IN DESIGN. THE STUDENTS SHOULD BE HIGH SCHOOL GRADUATES WHO HAVE STUDIED CALCULUS AND HAVE COMPLETED THE SERIES COURSE ON PRELIMINARY HIGHWAY PLANNING. (JK)

AVAILABILITY: PUBLICATIONS DISTRIBUTION UNIT, NEW YORK STATE EDUCATION DEPARTMENT, EDUCATION BUILDING, ALBANY, NEW YORK 12224 (\$2.00, SINGLE COPIES).

INSTITUTION NAME: NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF CONTINUING EDUCATION CURRICULUM DEVELOPMENT

ACCESSION NUMBERS:

VTCC9854

113

PUBLICATION DATE: 67

TITLE: CURRICULUM GUIDE FOR VOCATIONAL CARPENTRY, GRADES ELEVEN AND TWELVE.

DESCRIPTOR: \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*CARPENTERS;  
\*WOODWORKING; \*BUILDING TRADES; VOCATIONAL HIGH SCHOOLS; GRADE 11; GRADE 12

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 3470.

ISSUE: AIM SPRING 1970.

THIS CURRICULUM GUIDE IS FOR USE IN PLANNING AND IMPLEMENTING VOCATIONAL CARPENTRY COURSES FOR GRADES 11 AND 12 IN CHICAGO VOCATIONAL HIGH SCHOOLS. THE PRIMARY OBJECTIVE OF THE PROPOSED COURSE IS TO PREPARE STUDENTS FOR EMPLOYMENT OR FOR HIGHER TECHNICAL TRAINING BY ACQUAINTING THEM WITH MODERN TECHNOLOGICAL METHODS, TOOLS, MACHINERY AND MATERIALS. THE USE OF STUDENT PROJECTS IS EMPHASIZED TO DEVELOP COMPETENCE IN MANIPULATIVE SKILLS, AND SPECIFIC KNOWLEDGE UNITS STRESS MODERN METHODS AND TECHNIQUES USED IN THE FIELD. CONTENTS INCLUDE A BRIEF INTRODUCTION, COURSE OUTLINES FOR GRADES 11 AND 12, AND A BIBLIOGRAPHY INCLUDING BOOKS, FILMS, FILMSTRIPS, AND SUGGESTED FIELD TRIPS. UNITS INCLUDED IN THE GRADE 11 OUTLINE ARE ORIENTATION, FRAME BUILDINGS, MASONRY BUILDINGS, CONCRETE FORM WORK, AND ROUGH FRAMING, WHILE THE OUTLINE FOR GRADE 12 COVERS ROOF FRAMING, EXTERIOR FINISH, STAIRBUILDING, AND INTERIOR FINISH. EACH UNIT PROVIDES SKILLS AND UNDERSTANDINGS TO BE DEVELOPED, CONTENT TO BE COVERED, TEACHER ACTIVITIES, PROJECTS, DEVELOPMENTAL VOCABULARY, AND RESOURCE MATERIALS. NUMEROUS PHOTOGRAPHS, DIAGRAMS, AND DRAWINGS ILLUSTRATE THE GUIDE. STUDENT PREREQUISITES TO THE COURSE ARE 4 SEMESTERS OF DRAFTING AND 1 SEMESTER EACH OF BASIC VOCATIONAL WOODWORKING AND WELDING. (AW)

INSTITUTION NAME: CHICAGO BOARD OF EDUCATION, ILL.

ACCESSION NUMBERS:

VT009848

114

PUBLICATION DATE: APR 60

TITLE: CARPENTRY AND BUILDING CONSTRUCTION.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*CARPENTERS; \*BUILDING TRADES;  
\*SUPPLEMENTARY TEXTBOOKS; WOODWORKING; RESOURCE GUIDES; \*TEACHING GUIDES;  
VOCABULARY; ORTHOGRAPHIC SYMBOLS; CONSTRUCTION INDUSTRY; \*CONSTRUCTION  
(PROCESS); PERFORMANCE SPECIFICATIONS

IDENTIFIER: DEPARTMENT OF THE ARMY; TM 5-460

EDRS PRICE: MF. AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 201P.

ISSUE: AIM SUMMER 1970

APPLICABLE FOR BOTH TRAINING AND FIELD USE, THIS MANUAL PROVIDES INSTRUCTION IN MAINTAINING, REPAIRING, AND CONSTRUCTING BUILDINGS AND OTHER WOOD STRUCTURES AS WELL AS GIVING INFORMATION ON PREFABRICATED BUILDINGS, INCLUDING PROPER ERECTION, CREW ORGANIZATION, ERECTION TIME RATES, AND RECOMMENDED PROCEDURES. TOPICS COVERED ARE: (1) LUMBER, (2) JOINTS, SPLICES, AND METHODS OF FASTENING, (3) LAYOUT AND FOUNDATIONS, (4) FRAMING, (5) COVERINGS, (6) ACCESSORIES, AND (7) METHODS OF FRAME CONSTRUCTION. SUPPLEMENTARY MATERIALS INCLUDE REFERENCES, PAINT REQUIREMENTS, CONSTRUCTION RATES, A GLOSSARY OF TERMS, AND ABBREVIATIONS AND SYMBOLS. (GR)

REPORT NUMBER: TM-5-460

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE,  
WASHINGTON, D.C. 20402 (D101.11:5-460, \$.75).

INSTITUTION NAME: DEPARTMENT OF THE ARMY, WASHINGTON, D.C.

ACCESSION NUMBERS:

VT009672

115

PUBLICATION DATE: 67

TITLE: INDUSTRIAL COOPERATIVE TRAINING; CURRICULUM GUIDE. CURRICULUM BULLETIN SERIES.

DESCRIPTOR: \*CURRICULUM GUIDES; #COOPERATIVE EDUCATION; \*TRADE AND INDUSTRIAL EDUCATION; HEALTH OCCUPATIONS; AUTO MECHANICS (OCCUPATION); METAL WORKING OCCUPATIONS; REFRIGERATION MECHANICS; GRADE 11; GRADE 12; MACHINISTS; GRAPHIC ARTS; FOOD SERVICE OCCUPATIONS; ELECTRICIANS; DRAFTSMEN; TELEVISION REPAIRMEN; BUILDING TRADES; FOODS PROCESSING OCCUPATIONS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 164P.

ISSUE: AIM SPRING 1970

DEVELOPED BY INDUSTRIAL COOPERATIVE TRAINING AND VOCATIONAL-INDUSTRIAL EDUCATION COORDINATORS OF THE DALLAS INDEPENDENT SCHOOL DISTRICT, TEXAS, THIS CURRICULUM GUIDE IS FOR USE BY TEACHERS, COUNSELORS, AND SUPERVISORS IN PLANNING AND IMPLEMENTING LOCAL INDUSTRIAL COOPERATIVE TRAINING PROGRAMS FOR GRADES 11 AND 12. BRIEF INTRODUCTORY INFORMATION ON THE PURPOSES, SCOPE, EXPECTED OUTCOMES, AND AREAS OF LEARNING OF THE GUIDE IS FOLLOWED BY TOPICAL OUTLINES OF 11 CLUSTERS OF TRADES: (1) AUTOMOTIVE, (2) BUILDING, (3) COMMUNICATION, (4) DRAFTING, (5) ELECTRICAL, (6) FOOD, (7) GRAPHIC ARTS, (8) HEALTH OCCUPATIONS, (9) MECHANICAL, (10) METAL, AND (11) AIR CONDITIONING AND REFRIGERATION. A MISCELLANEOUS SECTION COVERS THE TRADES OF DIESEL MECHANIC, DRY CLEANER, FLORAL DESIGNER, LOCKSMITH, OPTICIAN, PLASTICS MOLDER, AND SHOE REPAIRMAN. ON-THE-JOB EXPERIENCES, RELATED STUDIES, AND BIBLIOGRAPHIES ARE GIVEN FOR EACH OCCUPATION COVERED. APPENDIXES INCLUDE SAMPLE REPORTS AND LETTERS, AN ORGANIZATIONAL CHART, A SAMPLE SCHOOL CALENDAR, LIST OF APPROVED OCCUPATIONS FOR THE PROGRAM, AND OPERATIONAL PROCEDURES. RECOMMENDED TIME ALLOTMENT FOR COURSES IN THE PROGRAM IS 25 HOURS PER WEEK ON-THE-JOB TRAINING PLUS 55 MINUTES PER DAY RELATED CLASSROOM TRAINING. (AW)

AVAILABILITY: DALLAS INDEPENDENT SCHOOL DISTRICT, 3700 ROSS AVENUE, DALLAS, TEXAS 75204 (\$3.25).

INSTITUTION NAME: DALLAS INDEPENDENT SCHOOL DISTRICT, TEX.

ACCESSION NUMBERS:

VTO09415

116

PUBLICATION DATE: 65

TITLE: CONCRETE TECHNOLOGY: INSTRUCTOR'S GUIDE.

DESCRIPTOR: \*TEACHING GUIDES; \*CURRICULUM GUIDES; SUPPLEMENTARY TEXTBOOKS; -  
\*TRADE AND INDUSTRIAL EDUCATION; \*CEMENT INDUSTRY; \*BUILDING TRADES

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 26CP.

ISSUE: AIM WINTER1969

A COOPERATIVE EFFORT OF THE PORTLAND CEMENT ASSOCIATION AND THE NATIONAL READY MIXED CONCRETE ASSOCIATION, THIS INSTRUCTOR'S GUIDE IS FOR USE IN PLANNING AND IMPLEMENTING VOCATIONAL AND PRE-APPRENTICESHIP TRAINING FOR ALL LEVELS FROM ELEMENTARY SCHOOL THROUGH ADULT EDUCATION. THE OCCUPATIONAL FOCUS IS ON THE CEMENT MASON AND RELATED BUILDING TRADES. THE CONTENT IS DIVIDED INTO 21 UNITS, EACH COVERING A PARTICULAR PHASE OF CONCRETE TECHNOLOGY. EACH UNIT CONTAINS TWO PARTS, OF WHICH PART I, THE INSTRUCTOR'S GUIDE, CONTAINS A CLEARLY STATED OBJECTIVE, INTRODUCTORY INFORMATION, PRESENTATION OUTLINE, APPLICATION SUGGESTIONS, AND TEST QUESTIONS OR DISCUSSION POINTS. PART II OF EACH UNIT IS THE TEXT MATERIAL FROM WHICH THE INSTRUCTOR'S GUIDE HAS BEEN DEVELOPED, AND COVERS THE TEACHING OUTLINE IN DETAIL. SOME OF THE TOPICS COVERED IN THE 80-HOUR COURSE ARE: (1) JOB OPPORTUNITIES, (2) HISTORY AND USES OF CONCRETE, (3) COMPONENTS OF CONCRETE, (4) CONCRETE PLACING, CURING, FINISHING, AND TESTING, (5) TOOLS AND RELATED MATERIALS, (6) JOB ESTIMATE, (7) REINFORCING CONCRETE, AND (8) WEATHER CONDITIONS AND CONCRETE. SUPPLEMENTARY MATERIALS INCLUDE REFERENCE AND FILM LISTS. AN ACCOMPANYING STUDENT MANUAL IS AVAILABLE FROM DELMAR PUBLISHERS, INC., MOUNTAINVIEW AVENUE, ALBANY, NEW YORK 10025. PRICES AND INFORMATION ON THE MANUAL MAY BE OBTAINED BY WRITING TO THEM. (AW)

AVAILABILITY: PORTLAND CEMENT ASSOCIATION, SUITE 409, 601 ROCKWELL AVENUE, CLEVELAND, OHIO 44114 (\$1.13).

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, CHICAGO, ILL.; NATIONAL READY MIXED CONCRETE ASSOCIATION, SILVER SPRING, M

ACCESSION NUMBERS:

VT009413

117

PUBLICATION DATE: JUL68

TITLE: DESIGN AND CONTROL OF CONCRETE MIXTURES.

DESCRIPTOR: RESOURCE MATERIALS; \*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; TECHNICAL EDUCATION; \*CEMENT INDUSTRY; BUILDING TRADES; \*CONSTRUCTION INDUSTRY; \*BUILDING MATERIALS; ARCHITECTS; ENGINEERS

IDENTIFIER: READY MIX CONCRETE

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 119P.

ISSUE: AIM WINTER1969

DEVELOPED AND REVISED BY THE PORTLAND CEMENT ASSOCIATION AND TESTED BY SOME 300 ENGINEERS, THIS BOOKLET IS DESIGNED TO SUPPLY THE MOST CURRENT INFORMATION AVAILABLE ON DESIGN AND CONTROL OF CONCRETE MIXTURES TO ALL USERS OF CONCRETE. RECOMMENDED AS RESOURCE MATERIAL FOR ARCHITECTS, ENGINEERS, AND CONTRACTORS IN WRITING SPECIFICATIONS FOR "READY-MIX" CONCRETE PRODUCERS, THE CONTENTS INCLUDE CHAPTERS ON: (1) FUNDAMENTAL FACTS ABOUT CONCRETE, (2) PORTLAND CEMENTS, (3) MIXING WATER FOR CONCRETE, (4) AGGREGATES FOR CONCRETE, (5) AIR-ENTRAINED CONCRETE, (6) ADMIXTURES FOR CONCRETE, (7) PROPORTIONING CONCRETE MIXTURES, (8) HOT-WEATHER CONCRETING, (11) COLD-WEATHER CONCRETING, (12) VOLUME CHANGES OF CONCRETE, (13) STRUCTURAL LIGHTWEIGHT CONCRETE, (14) CONTROL TESTS FOR QUALITY CONCRETE, (15) SPECIAL TYPES OF CONCRETE, AND (16) SUGGESTED SPECIFICATIONS FOR PLAIN AND REINFORCED CONCRETE. SUPPLEMENTARY MATERIALS INCLUDE A WEIGHTS AND MEASURES CONVERSION TABLE AND SELECTED REFERENCES LISTED FOR EACH CHAPTER. (AW)

AVAILABILITY: PORTLAND CEMENT ASSOCIATION, SUITE 409, 601 ROCKWELL AVENUE, CLEVELAND, OHIO 44114.

INSTITUTION NAME: PORTLAND CEMENT ASSOCIATION, SKOKIE, ILL.

ACCESSION NUMBERS:

VT009386

118

PUBLICATION DATE: APR 68

TITLE: FIVE YEAR SURVEY OF TRAINING NEEDS INCLUDING NEW EQUIPMENT, NEW JOB SKILLS, EMPLOYMENT OUTLOOK, AND ANCILLARY TRAINING IN TWELVE MAJOR AREAS.

DESCRIPTOR: \*VOCATIONAL EDUCATION; \*HIGH SCHOOL CURRICULUM; \*EDUCATIONAL NEEDS; TRAINING; JOB SKILLS; EDUCATIONAL EQUIPMENT; ANCILLARY SERVICES; EMPLOYMENT PROJECTIONS; BUILDING TRADES; COSMETOLOGY; DRAFTING; ELECTRICAL OCCUPATIONS; ELECTRONICS; FOOD; HEALTH OCCUPATIONS; PRINTING; WOODWORKING; AEROSPACE INDUSTRY

IDENTIFIER: \*NEW YORK CITY

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 78P.

ISSUE: ARM FALL 1970

THE CURRENT STATUS AND A FIVE-YEAR PROJECTION OF TRAINING NEEDS, EQUIPMENT, JOB SKILLS, ANCILLARY TRAINING, AND EMPLOYMENT OUTLOOK AT THE HIGH SCHOOL LEVEL ARE REPORTED FOR 13 MAJOR OCCUPATIONAL AREAS: AUTOMOTIVE TRADES, BUILDING TRADES, COSMETOLOGY, DRAFTING, ELECTRICAL TRADES, ELECTRONICS, FASHION TRADES, FOOD TRADES, HEALTH AND HOSPITAL, MACHINE SHOP, PRINTING, WOODWORKING, AND AERONAUTICS. DATA WERE COLLECTED BY QUESTIONNAIRE FROM 120 COMMISSION MEMBERS REPRESENTING VARIOUS OCCUPATIONAL AREAS. (CH)

INSTITUTION NAME: NEW YORK CITY BOARD OF EDUCATION, BROOKLYN, N.Y. ADVISORY BOARD FOR VOCATIONAL AND EXTENSION EDUCATION

ACCESSION NUMBERS:

VT009081

119

PUBLICATION DATE: SEP66

TITLE: A SUGGESTED GUIDE FOR TEACHING SLOW LEARNERS IN INDUSTRIAL ARTS IN THE PUBLIC SCHOOLS.

PERSONAL AUTHOR: BARRON, LAWRENCE, AND OTHERS

DESCRIPTOR: \*CURRICULUM GUIDES; \*INDUSTRIAL EDUCATION; \*LOW ABILITY STUDENTS; \*SLOW LEARNERS; SECONDARY GRADES; OCCUPATIONAL CLUSTERS; \*JOB SKILLS; BUILDING TRADES; AUTO MECHANICS; MANUFACTURING INDUSTRY; WELDERS

EDRS PRICE: MF AVAILABLE IN VT-EKIC SET.

DESCRIPTIVE NOTE: 42P.

ISSUE: AIM WINTER1969.

DEVELOPED THROUGH A WORKSHOP OF HIGH SCHOOL INDUSTRIAL ARTS INSTRUCTORS AND EDUCATIONAL ADMINISTRATORS, THIS GUIDE IS DESIGNED TO AID HIGH SCHOOL INDUSTRIAL ARTS TEACHERS IN CONDUCTING SPECIAL OCCUPATIONAL CLASSES FOR SLOW LEARNERS. THE MATERIAL IS RECOMMENDED FOR USE WITH SMALL CLASSES OF MALE STUDENTS WITH I.Q.'S RANGING FROM 75-90. THE CONTENT INCLUDES SUGGESTIONS FOR TEACHERS, A STATEMENT OF OBJECTIVES, AND TOPICAL OUTLINES OF A VARIETY OF OCCUPATIONAL SKILLS TO BE TAUGHT FROM GRADES 7 THROUGH 12. OCCUPATIONS OUTLINED ARE: (1) PRODUCTION OF HOME ACCESSORIES (GRADE 7), (2) BUILDING REPAIRS AND MAINTENANCE AND SMALL GAS ENGINE SERVICING (GRADE 9, TWO UNITS), (3) INDUSTRIAL MACHINING TECHNIQUES (GRADE 10), (4) BUILDING TRADES (GRADE 11), AND (5) AUTOMOTIVE SERVICE STATION ATTENDANT (GRADE 12). NO EIGHTH GRADE PROGRAM HAD BEEN DEVELOPED AT TIME OF PUBLICATION. THE MIMEOGRAPHED OUTLINES PROVIDE BRIEF DESCRIPTIVE INFORMATION FOR EACH OCCUPATION, JOBS TO BE PERFORMED, AND ESSENTIAL RELATED INFORMATION. THE SUBJECT MATTER SHOULD BE USED SELECTIVELY TO MEET THE NEEDS OF THE GROUP AND THE INDIVIDUAL STUDENTS. (AW)

AVAILABILITY: STATE DEPARTMENT OF EDUCATION, BUREAU OF VOCATIONAL EDUCATION, EDUCATION BUILDING, AUGUSTA, MAINE 04330 (NO CHARGE).

INSTITUTION NAME: MAINE STATE DEPT. OF EDUCATION, AUGUSTA

ACCESSION NUMBERS: VT009002 120

PUBLICATION DATE: 65

TITLE: TRAINING PLAN OUTLINES FOR MANPOWER DEVELOPMENT AND TRAINING ACT COURSES FOR BRICKLAYERS, TILE SETTERS, AND CEMENT FINISHERS.

DESCRIPTOR: \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*BRICKLAYERS; \*BUILDING TRADES; \*ADULT VOCATIONAL EDUCATION; COURSE CONTENT; COURSE ORGANIZATION; PROGRAM COSTS; FEDERAL PROGRAMS

IDENTIFIER: \*MANPOWER DEVELOPMENT AND TRAINING ACT PROGRAMS; MDTA PROGRAMS; TILE SETTERS; CEMENT FINISHERS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 27P.

ISSUE: AIM FALL1969

EXAMPLES OF TRAINING PLAN OUTLINES FOR ENTRY LEVEL, PREAPPRENTICESHIP, AND REFRESHER MANPOWER DEVELOPMENT AND TRAINING ACT (MDTA) COURSES DESIGNED TO PREPARE TRAINEES FOR EMPLOYMENT AS BRICKLAYERS, TILE SETTERS, OR CEMENT FINISHERS ARE GIVEN. PREPARED BY TRAINING AGENCIES UNDER PROVISIONS OF THE MDTA, BRIEF DESCRIPTIVE INFORMATION AND A TOPICAL OUTLINE OF EACH COURSE COVER: (1) MAJOR UNITS, (2) CLOCK HOURS, (3) SPECIFIC JOB SKILLS TO BE DEVELOPED, (4) INSTRUCTIONAL MATERIALS, TEACHING AIDS, AND NEW EQUIPMENT, AND (5) EVALUATION OF PROGRESS AND ACHIEVEMENT. THE EXAMPLES OF TRAINING PLAN OUTLINES ILLUSTRATE COURSES RANGING IN LENGTH FROM 300 TO 600 CLOCK HOURS. SOME OUTLINES INCLUDE PROPOSED COURSE BUDGETS. (AW)

INSTITUTION NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. DIV. OF MANPOWER DEVELOPMENT AND TRAINING

ACCESSION NUMFRS:

VT008961

121

PUBLICATION DATE: 65

TITLE: TRAINING PLAN OUTLINES FOR MANPOWER DEVELOPMENT AND TRAINING ACT COURSES FOR PLUMBERS AND PLUMBER HELPERS.

DESCRIPTOR: \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*PLUMBERS; \*BUILDING TRADES; \*ADULT VOCATIONAL EDUCATION; COURSE CONTENT; COURSE ORGANIZATION; PROGRAM COSTS; FEDERAL PROGRAMS

IDENTIFIER: \*MANPOWER DEVELOPMENT AND TRAINING ACT PROGRAMS; MDTA PROGRAMS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 15P.

ISSUE: AIM FALL1969

EXAMPLES OF TRAINING PLAN OUTLINES FOR ENTRY LEVEL AND REFRESHER MANPOWER DEVELOPMENT AND TRAINING ACT (MDTA) COURSES DESIGNED TO PREPARE TRAINEES FOR EMPLOYMENT AS PLUMBERS AND PLUMBER HELPERS ARE GIVEN. PREPARED BY TRAINING AGENCIES UNDER PROVISIONS OF THE MDTA, THESE EXAMPLES PRESENT BRIEF DESCRIPTIVE INFORMATION AND A TOPIC OUTLINE OF EACH COURSE, INCLUDING: (1) MAJOR UNITS, (2) CLOCK HOURS, (3) SPECIFIC JOB SKILLS TO BE DEVELOPED, (4) INSTRUCTIONAL MATERIALS, TEACHING AIDS, AND NEW EQUIPMENT, AND (5) EVALUATION OF PROGRESS AND ACHIEVEMENT. THE EXAMPLES OF TRAINING PLAN OUTLINES ILLUSTRATE COURSES RANGING IN LENGTH FROM 390 TO 2400 CLOCK HOURS. (AW)

INSTITUTION NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. DIV. OF MANPOWER DEVELOPMENT AND TRAINING

ACCESSION NUMBERS:

VT006960

122

PUBLICATION DATE: 65

TITLE: TRAINING PLAN OUTLINES FOR MANPOWER DEVELOPMENT AND TRAINING ACT COURSES FOR PAINTERS AND PAINT SPRAYERS.

DESCRIPTOR: \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*PAINTERS; \*BUILDING TRADES; \*ADULT VOCATIONAL EDUCATION; COURSE CONTENT; COURSE ORGANIZATION; PROGRAM LENGTH; PROGRAM COSTS; FEDERAL PROGRAMS

IDENTIFIER: \*MANPOWER DEVELOPMENT AND TRAINING ACT PROGRAMS; MDTA PROGRAMS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 11P.

ISSUE: AIM FALL 1969

EXAMPLES OF TRAINING PLAN OUTLINES FOR ENTRY LEVEL AND REFRESHER MANPOWER DEVELOPMENT AND TRAINING ACT (MDTA) COURSES DESIGNED TO PREPARE TRAINEES FOR EMPLOYMENT AS PAINTERS AND PAINT SPRAYERS ARE GIVEN. PREPARED BY TRAINING AGENCIES UNDER PROVISIONS OF THE MDTA, THESE OUTLINES PRESENT BRIEF DESCRIPTIVE INFORMATION AND A TOPICAL OUTLINE OF EACH COURSE, INCLUDING: (1) MAJOR UNITS, (2) CLOCK HOURS, (3) SPECIFIC SKILLS TO BE DEVELOPED, (4) INSTRUCTIONAL MATERIALS, TEACHING AIDS, AND NEW EQUIPMENT, AND (5) EVALUATION OF PROGRESS AND ACHIEVEMENT. THE TRAINING PLAN OUTLINES ILLUSTRATE COURSES RANGING IN LENGTH FROM 600 TO 2080 CLOCK HOURS. (AW)

INSTITUTION NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. DIV. OF MANPOWER DEVELOPMENT AND TRAINING

ACCESSION NUMBERS:

VTCOP959

123

PUBLICATION DATE: 65

TITLE: TRAINING PLAN OUTLINES FOR MANPOWER DEVELOPMENT AND TRAINING ACT COURSES FOR CARPENTERS, MILLMEN, AND WOODWORKING MACHINE OPERATORS.

DESCRIPTOR: \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*CARPENTERS; \*BUILDING TRADES; \*ADULT VOCATIONAL EDUCATION; COURSE CONTENT; COURSE ORGANIZATION; PROGRAM LENGTH; PROGRAM COSTS; FEDERAL PROGRAMS; WOODWORKING; CABINETMAKING

IDENTIFIER: \*MANPOWER DEVELOPMENT AND TRAINING ACT PROGRAMS; MDTA PROGRAMS

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 32P.

ISSUE: AIM FALL1969

EXAMPLES OF TRAINING PLAN OUTLINES FOR ENTRY LEVEL AND REFRESHER MANPOWER DEVELOPMENT AND TRAINING ACT (MDTA) COURSES DESIGNED TO PREPARE TRAINEES FOR EMPLOYMENT AS CARPENTERS, MILLMEN, AND WOODWORKING MACHINE OPERATORS ARE GIVEN. PREPARED BY TRAINING AGENCIES UNDER PROVISIONS OF THE MDTA, THESE OUTLINES PRESENT BRIEF DESCRIPTIVE INFORMATION AND A TOPICAL OUTLINE OF EACH COURSE, INCLUDING: (1) MAJOR UNITS, (2) CLOCK HOURS, (3) SPECIFIC SKILLS TO BE DEVELOPED, (4) INSTRUCTIONAL MATERIALS, TEACHING AIDS, AND NEW EQUIPMENT, AND (5) EVALUATION OF PROGRESS ACHIEVEMENT. THE EXAMPLES OF TRAINING PLAN OUTLINES ILLUSTRATE COURSES RANGING IN LENGTH FROM 600 TO 2000 CLOCK HOURS. (AW)

INSTITUTION NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. DIV. OF MANPOWER DEVELOPMENT AND TRAINING

ACCESSION NUMBERS:

VTCC84CP

124

PUBLICATION DATE: 64

TITLE: CARPENTRY AND MILLWORK. CURRICULUM GUIDES IN TRADE AND INDUSTRIAL EDUCATION.

DESCRIPTOR: \*TRADE AND INDUSTRIAL EDUCATION; \*CURRICULUM GUIDES; SECONDARY SCHOOLS; VOCATIONAL HIGH SCHOOLS; COURSE OBJECTIVES; \*BUILDING TRADES; \*WOODWORKING; \*CABINETMAKING

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 34P.

ISSUE: AIM WINTER1970

DEVELOPED BY A TRADE AND INDUSTRIAL EDUCATION CURRICULUM COMMITTEE, THIS CURRICULUM GUIDE MAY BE USED BY VOCATIONAL HIGH SCHOOL TEACHERS PLANNING OR TEACHING A COURSE FOR STUDENTS IN CARPENTRY AND MILLWORK. CONTENTS INCLUDE: (1) OBJECTIVES, (2) SUGGESTIONS FOR ORGANIZATION, MANAGEMENT, AND TEACHING OF THE CLASS, (3) INSTRUCTIONAL OUTLINE OF MANIPULATIVE SKILLS AND RELATED TECHNICAL KNOWLEDGE, (4) SAMPLES OF INSTRUCTION SHEETS USED IN TEACHING, AND (5) SAMPLES OF TESTS USED. THE MATERIAL REQUIRES 3 CLOCK HOURS DAILY, 15 HOURS PER WEEK, 36 WEEKS PER YEAR, OR A TOTAL OF 1,620 HOURS FOR 3 SCHOOL YEARS. (GR-1)

INSTITUTION NAME: DISTRICT OF COLUMBIA PUBLIC SCHOOLS, WASHINGTON, D.C.

ACCESSION NUMBERS:

VTC06764

125

PUBLICATION DATE: 62

TITLE: INFORMATION AND SUGGESTIONS FOR PLANNING AND CONSTRUCTING NEW MILK HOUSES, SELECTING, INSTALLING AND MAINTAINING MILK HOUSE EQUIPMENT . TEACHER EDUCATION SERIES VOLUME 4, NO. 1.

DESCRIPTOR: \*RESOURCE MATERIALS; \*VOCATIONAL AGRICULTURE; \*AGRICULTURAL ENGINEERING; \*FARM STRUCTURES; GRADE 12; ADULT FARMER EDUCATION; \*DAIRYMEN; EQUIPMENT MAINTENANCE; PURCHASING; EQUIPMENT UTILIZATION; CONSTRUCTION NEEDS; CONSTRUCTION (PROCESS)

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 39P.

ISSUE: AIM SPRING1969

DEVELOPED BY A TEACHER EDUCATOR IN COOPERATION WITH SUBJECT MATTER SPECIALISTS, THIS TEACHER AND STUDENT REFERENCE IS FOR HIGH SCHOOL OR ADULT FARMER CLASSES IN PRODUCTION AGRICULTURE IN THE NORTHERN STATES. SECTIONS IN THE UNIT RELATED TO PLANNING AND CONSTRUCTING NEW MILK HOUSES ARE: (1) LOOKING TO THE FUTURE, (2) GENERAL STATEMENTS ABOUT SANITARY REGULATIONS, (3) SANITARY REGULATIONS FOR MILK HOUSE CONSTRUCTION, AND (4) MILK HOUSE PLANS. THE UNIT RELATING TO SELECTING, INSTALLING, AND MAINTAINING MILK HOUSE EQUIPMENT CONTAINS: (1) GENERAL STATEMENTS ABOUT MILK HOUSE EQUIPMENT, (2) BULK MILK COOLING TANKS, WASH TANKS, WATER HEATERS AND OTHER EQUIPMENT, (3) PIPELINE INSTALLATIONS, AND (4) INSTRUCTION MANUALS AND OPERATING INSTRUCTIONS. SUPPLEMENTARY MATERIAL INCLUDES BULK MILK TANK DIMENSIONS AND MANUFACTURERS AND A REFERENCE LIST OF MATERIALS FROM COMMERCIAL COMPANIES, MILK SANITATION AGENCIES, MILK DEALER ASSOCIATIONS, STATE AGENCIES, ELECTRICAL ASSOCIATIONS, CEMENT ASSOCIATIONS, AND UNIVERSITIES. TEACHERS SHOULD BE COMPETENT IN AGRICULTURAL PRODUCTION AND MECHANICS AND STUDENTS SHOULD BE OF 12TH GRADE OR ADULT LEVEL AND HAVE AN INTEREST IN DAIRY FARMING, (DM))

INSTITUTION NAME: PENNSYLVANIA STATE UNIV., UNIVERSITY PARK. DEPT. OF AGRICULTURAL EDUCATION

ACCESSION NUMBERS:

VTOC6680

126

PUBLICATION DATE: 68

TITLE: UTILIZATION OF CONSTRUCTIONAL ACTIVITIES IN THE ELEMENTARY CLASSROOM BY GRADUATES OF THE UNIVERSITY OF MISSOURI-COLUMBIA.

PERSONAL AUTHOR: LLOYD, CLIFFORD JOHN

DESCRIPTOR: DOCTORAL THESSES; \*CONSTRUCTION (PROCESS); \*INDUSTRIAL ARTS; \*ELEMENTARY GRADES; TEACHER CHARACTERISTICS; \*TEACHER EDUCATION CURRICULUM; TEACHER ATTITUDES; EDUCATIONAL COORDINATION; SPECIAL EDUCATION; SPECIAL EDUCATION TEACHERS; \*ELEMENTARY SCHOOL TEACHERS; TEACHING TECHNIQUES; INTEGRATED ACTIVITIES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 238P.

ISSUE: ARM FALL1970

MAJOR PURPOSES OF THIS STUDY WERE TO ASCERTAIN THE BACKGROUND OF THE STATUS OF A SAMPLE OF ELEMENTARY AND SPECIAL EDUCATION TEACHERS, TO ASCERTAIN THE EXTENT TO WHICH THESE TEACHERS UTILIZED STUDENT CONSTRUCTIONAL ACTIVITIES, AND TO PROVIDE AN INFORMATION BASE CONCERNING SUCH CONSTRUCTIONAL ACTIVITIES. DATA WERE COLLECTED BY A MAILED QUESTIONNAIRE FROM 825 TEACHERS (62.6 PERCENT OF THE POPULATION) WHO HAD RECEIVED DEGREES IN ELEMENTARY EDUCATION, ELEMENTARY/JUNIOR HIGH EDUCATION, AND SPECIAL EDUCATION AT THE UNIVERSITY OF MISSOURI. SOME CONCLUSIONS WERE: (1) TEACHERS ARE INADEQUATELY PREPARED TO IMPLEMENT CERTAIN PHASES OF A CONSTRUCTIONAL ACTIVITY PROGRAM, (2) INCLUSION OF SPECIAL PREPARATION IN UNDERGRADUATE PROGRAMS WOULD INCREASE UTILIZATION OF CONSTRUCTIONAL ACTIVITIES BY FUTURE GRADUATES, AND (3) INADEQUATE SUPPLIES AND EQUIPMENT LIMIT THE USE OF CONSTRUCTIONAL ACTIVITIES. THIS ED.D. THESIS WAS SUBMITTED TO THE UNIVERSITY OF MISSOURI. (EM)

AVAILABILITY: UNIVERSITY MICROFILMS, INC., 300 NORTH ZEEF ROAD, ANN ARBOR, MICHIGAN 48106.

ACCESSION NUMBERS:

VT006671

127

PUBLICATION DATE: 68

TITLE: THE EFFECT OF CONSTRUCTIONAL ACTIVITIES UPON ACHIEVEMENT IN THE AREAS OF SCIENCE AND MATHEMATICS AT THE FIFTH GRADE LEVEL.

PERSONAL AUTHOR: DOWNS, WILLIAM ALAN

DESCRIPTOR: GRADE 5; \*INDUSTRIAL ARTS; EXPERIMENTAL GROUPS; CONTROL GROUPS; DOCTORAL THESES; \*ELEMENTARY SCHOOL SCIENCE; ELEMENTARY GRADES; \*ENRICHMENT ACTIVITIES; URBAN SCHOOLS; ACADEMIC ENRICHMENT; RETENTION; \*ACHIEVEMENT GAINS; \*CONSTRUCTION (PROCESS); TEACHING TECHNIQUES; INTEGRATED ACTIVITIES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 176P.

ISSUE: ARM FALL 1969

THE DETERMINATION OF THE EFFECTS OF CONSTRUCTIONAL ACTIVITIES ON THE LEARNING AND RETENTION OF SCIENCE AND MATHEMATICS KNOWLEDGE IN FIFTH GRADE STUDENTS WAS THE PURPOSE OF THIS STUDY. ONE HUNDRED SEVENTY-EIGHT STUDENTS RECEIVED TREATMENT A INVOLVING THE BUILDING OF BIRD HOUSES IN CONJUNCTION WITH A SCIENCE UNIT ON BIRDS, AND 159 STUDENTS RECEIVED TREATMENT B INVOLVING CONSTRUCTION OF ITEMS RELATED TO MEASUREMENT AND MATHEMATICS AND THE UNIT ON BIRDS. A CONTROL GROUP OF 285 STUDENTS ENGAGED IN NO CONSTRUCTIONAL ACTIVITIES. TWENTY-FOUR TEACHERS IN NINE SCHOOLS WERE INVOLVED. A PRE-TEST, POST TEST, AND FIVE-WEEK RETENTION TEST WERE USED. CONTROL VARIABLES WERE 1.0., RACE, SOCIOECONOMIC LEVELS, STUDENT POPULATION STABILITY, AND SIZE OF SCHOOLS. FINDINGS INCLUDED: (1) HIGH ABILITY STUDENTS IN BOTH EXPERIMENTAL GROUPS ACHIEVED SIGNIFICANTLY HIGHER THAN THE LOW ABILITY STUDENTS IN THE CONTROL GROUP, (2) THERE WERE NO SIGNIFICANT DIFFERENCES IN ACHIEVEMENT OR RETENTION DUE TO SEX, (3) THERE WERE NO SIGNIFICANT DIFFERENCES DUE TO TREATMENTS FOR MALES, (4) FEMALE STUDENTS BENEFITED MOST IN ACHIEVEMENT AND RETENTION FROM TREATMENT A, AND (5) MATHEMATICS RETENTION SCORES FOR GROUP A WERE SIGNIFICANTLY GREATER THAN GROUP C. IT WAS CONCLUDED THAT TREATMENT A WAS THE MORE EFFECTIVE METHOD. (EM)

AVAILABILITY: UNIVERSITY MICROFILMS, INC., 300 NORTH ZEEB ROAD, ANN ARBOR, MICHIGAN 48106.

ACCESSION NUMBER: VT004715 128

PUBLICATION DATE: 63

TITLE: INTRODUCTION TO APPRENTICESHIP, WORKBOOK.

DESCRIPTOR: \*STUDY GUIDES; WORKBOOKS; \*TRADE AND INDUSTRIAL EDUCATION;  
\*APPRENTICESHIPS; \*BUILDING TRADES

ECRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 219P.

ISSUE: AIM FALL 1968

THIS STUDY GUIDE IS FOR USE BY BEGINNING APPRENTICES IN THE RELATED TECHNICAL PHASE OF INSTRUCTION FOR CONSTRUCTION TRADES. IT WAS DEVELOPED BY THE STATE EDUCATIONAL ADVISORY COMMITTEE. THE MAJOR UNITS ARE (1) THE APPRENTICE AND HIS TRADE, (2) THE RELATED TRAINING PROGRAM, (3) WORKMEN'S LEGAL RIGHTS AND BENEFITS, (4) BASIC MATHEMATICS, (5) BASIC TOOLS, (6) BASIC SCIENCE, AND (7) BASIC BLUEPRINT READING. EACH UNIT GIVES AN INTRODUCTION, RELATED INFORMATION, A SUMMARY, AND AN OBJECTIVE-TYPE CHECKUP. THE UNITS REQUIRE A MINIMUM OF 144 HOURS INDIVIDUAL OR CLASS INSTRUCTION. STUDENTS SHOULD BE INDENTURED APPRENTICES, AND THE INSTRUCTOR SHOULD BE A QUALIFIED JOURNEYMAN. PHOTOGRAPHS, LINE DRAWINGS, A SUPPLEMENTARY REFERENCE LIST, AND PRACTICE PRINTS FOR USE WITH THE LAST UNIT ARE INCLUDED. (EM)

AVAILABILITY: BUREAU OF INDUSTRIAL EDUCATION, CALIFORNIA STATE DEPARTMENT OF EDUCATION, 721 CAPITOL MALL, SACRAMENTO, CALIFORNIA 95814 (\$2.25).

INSTITUTION NAME: CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF INDUSTRIAL EDUCATION

ACCESSION NUMBERS:

VT002685

129

PUBLICATION DATE: JUN65

TITLE: TRADE PREPARATORY TRAINING PLANNING GUIDE, CARPENTRY.

DESCRIPTOR: \*BUILDING TRADES; TRADE AND INDUSTRIAL EDUCATION; CARPENTERS;  
\*FACILITY GUIDELINES; \*ADMINISTRATOR GUIDES; PHYSICAL FACILITIES; \*EDUCATIONAL  
PLANNING

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 18P.

ISSUE: AIM FALL1970

DEVELOPED TO AID SCHOOL ADMINISTRATORS IN PLANNING FACILITIES FOR CONDUCTING  
TRADE PREPARATORY CLASSES IN CARPENTRY, THIS PLANNING GUIDE CONTAINS: (1) AN  
INTRODUCTION TO CARPENTRY, (2) COURSE OBJECTIVES, (3) COURSE ADMISSION  
REQUIREMENTS, (4) LABORATORY AND PHYSICAL FACILITIES, (5) SUGGESTED CARPENTRY  
SHOP LAYOUT, (6) SUGGESTED COURSE OUTLINE, (7) TOOL AND EQUIPMENT LIST, (8)  
RECOMMENDED SUPPLY LIST, AND (9) RECOMMENDED TEXTS AND REFERENCE MATERIALS LIST.  
(GR)

REPORT NUMBER: T.I.E. SERIES NO. 11

INSTITUTION NAME: NORTH CAROLINA STATE DEPT. OF PUBLIC INSTRUCTION, RALEIGH.  
TRADE AND INDUSTRIAL EDUCATION

ACCESSION NUMBERS:

VT002477

130

PUBLICATION DATE: 67

TITLE: ESSAYS ON APPRENTICESHIP .

PERSONAL AUTHOR: DUFFY, NORMAN F., ED.

DESCRIPTOR: \*APPRENTICESHIPS; EDUCATIONAL NEEDS; \*LABOR UNIONS; BUILDING TRADES; EDUCATIONAL PROGRAMS; LABOR MARKET; RECRUITMENT; MODELS; FOREIGN COUNTRIES; \*SKILLED OCCUPATIONS; EMPLOYMENT OPPORTUNITIES; \*TRADE AND INDUSTRIAL EDUCATION; COMMITTEES; CURRICULUM; HOME STUDY

IDENTIFIER: AUSTRALIA; WISCONSIN

EDRS PRICE: EDRS PRICE MF-\$0.75 HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 176P.

ISSUE: ARM WINTER1968

A COMPANION VOLUME TO "RESEARCH IN APPRENTICESHIP" (VT 003 555), THE PROCEEDINGS OF A CONFERENCE SPONSORED BY THE CENTER FOR STUDIES IN VOCATIONAL AND TECHNICAL EDUCATION OF THE UNIVERSITY OF WISCONSIN AND THE OFFICE OF MANPOWER POLICY, EVALUATION, AND RESEARCH, THESE ESSAYS ON APPRENTICESHIP CONTAIN MATERIAL OF INTEREST TO THOSE WHO ATTENDED THE CONFERENCE AND TO OTHERS CONCERNED WITH THIS PROBLEM AREA. SECTION I CONTAINS: (1) "APPRENTICESHIP, AN EVALUATION OF THE NEED" BY GEORGE STRAUSS WHICH DISCUSSES THE ROLE OF THE APPRENTICESHIP IN THE CONTEMPORARY AMERICAN LABOR MARKET, AND (2) "UNION INTERESTS IN APPRENTICESHIP AND OTHER TRAINING FORMS" BY JACK BARASH, WHICH DISCUSSES APPRENTICESHIP AS A UNION TACTIC TO CONTROL THE ENTRY OF NEW WORKERS IN SPECIFIC UNIONS AND OCCUPATIONS. SECTION II CONTAINS: (1) "A SURVEY OF WISCONSIN BUILDING TRADES JOINT APPRENTICESHIP COMMITTEES" BY KARL O. MAGNUS, WHICH COVERS THE INTERNAL STRUCTURE AND FUNCTIONS OF APPRENTICESHIP COMMITTEES, AND (2) "THE STRUCTURE OF RELATED INSTRUCTION IN WISCONSIN APPRENTICESHIP PROGRAMS" BY JAMES S. CRABTREE WHICH DISCUSSES ENROLLMENT POLICY, SIZE OF CLASS, CREDIT FOR PREVIOUS WORK, CREDIT FOR III, CONCERNED WITH THE LABOR MARKET ASPECTS OF APPRENTICESHIP, CONTAINS PAPERS BY NORMAN F. DUFFY: (1) "APPRENTICESHIP: A THEORETICAL MODEL," (2) "RECRUITMENT TO THE SKILLED TRADES: A STUDY OF A SEGMENT OF A SKILLED LABOR MARKET," AND (3) "A MODEL OF CHOICE IN LABOR MARKETS" WHICH DISCUSS APPRENTICESHIP IN AUSTRALIA. (HC)

AVAILABILITY: CENTER FOR STUDIES IN VOCATIONAL AND TECHNICAL EDUCATION, SOCIAL SCIENCES BUILDING, UNIVERSITY OF WISCONSIN, 1180 OBSERVATORY DRIVE, MADISON, WISCONSIN 53706 (\$3.00).

INSTITUTION NAME: WISCONSIN UNIV., MADISON. CENTER FOR STUDIES IN VOCATIONAL AND TECHNICAL EDUCATION

ACCESSION NUMBERS:

VT002987

131

PUBLICATION DATE: JUN63

TITLE: BUILDING TRADES, INSTRUCTOR'S GUIDE, FOR USE WITH A COURSE OF STUDY FOR STUDENTS IN BUILDING TRADES.

PERSONAL AUTHOR: PRATER, ROBERT L., AND OTHERS

DESCRIPTOR: \*TEACHING GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*BUILDING TRADES; GRADE 11; GRADE 12

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 94P.

ISSUE: AIM SUMMER1968

THIS INSTRUCTOR'S GUIDE IS FOR TEACHER USE WITH A COMPANION STUDY GUIDE(VT 002 086). IT IS DIVIDED INTO THE SAME AREAS IN THE SAME SEQUENCE AS THE STUDENT'S MANUAL--CARPENTRY, MASONRY AND CONCRETE, ELECTRICAL CONSTRUCTION, PLUMBING AND PIPEFITTING, PLASTERING, AND PAINTING AND DECORATING. KEY SHEETS CORRESPOND TO THE 46 ASSIGNMENT SHEETS IN THE STUDENT MANUAL, AND EACH CONTAINS A KEY TO THE STUDY QUESTIONS BY REFERENCE TO A SPECIFIC TEXT AND PAGE, SUGGESTED SUPPLEMENTARY ASSIGNMENTS, SUGGESTED VISUAL AIDS, AND OTHER INSTRUCTIONAL AIDS. IN ADDITION, 11 OBJECTIVE-TYPE TESTS WITH ANSWERS ARE INCLUDED. (EM)

AVAILABILITY: INDUSTRIAL EDUCATION, 103 INDUSTRIAL EDUCATION BUILDING, UNIVERSITY OF MISSOURI, COLUMBIA, MISSOURI 65201 (\$.50).

INSTITUTION NAME: MISSOURI UNIV., COLUMBIA. DEPT. OF INDUSTRIAL EDUCATION; MISSOURI STATE DEPT. OF EDUCATION, JEFFERSON CITY. INDUSTRIAL EDUCATION SECTI

ACCESSION NUMBERS:

VT002086

132

PUBLICATION DATE: JUN62

TITLE: BUILDING TRADES, A COURSE OF STUDY DESIGNED FOR STUDENTS IN BUILDING TRADES CLASSES.

PERSONAL AUTHOR: PRATER, ROBERT L., AND OTHERS

DESCRIPTOR: \*STUDY GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*BUILDING TRADES; GRADE 11; GRADE 12

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 120P.

ISSUE: AIM SUMMER 1968

THIS GUIDE IS FOR STUDENT USE IN RELATED INSTRUCTION CLASSES FOR THE BUILDING TRADES JOB CLUSTER COVERING CARPENTRY, MASONRY, ELECTRICITY, PLUMBING, PLASTERING, AND PAINTING. IT WAS DEVELOPED BY A COMMITTEE AND RESEARCH ASSISTANTS. OF THE 46 ASSIGNMENT SHEETS 24 ARE ON CARPENTRY. REPRESENTATIVE TITLES ARE (1) ESSENTIAL PREPARATION FOR BUILDING A HOUSE, (2) PRINCIPLES AND METHODS OF FRAMING FOR FLOORS, (3) PRINCIPLES OF PARTITIONS CONSTRUCTION, (4) SPECIAL ROOF FRAMING PROBLEMS, (5) INTERIOR TRIM AND FINISH, (6) MIXING, POURING, AND FINISHING CONCRETE, (7) FUNDAMENTALS OF ELECTRICAL WORK, (8) LAYOUT AND INSTALLATION OF HOUSE SEWERS AND DRAINS, (9) APPLYING PLASTER, AND (10) APPLICATION OF PAINT AND WALL COVERINGS. EACH ASSIGNMENT GIVES INTRODUCTION, ASSIGNMENT, REFERENCE, AND QUESTIONS. INSTRUCTORS SHOULD BE VOCATIONALLY COMPETENT, AND STUDENTS SHOULD BE JUNIORS WITH PROPER PREREQUISITES. THE SUGGESTED TIME ALLOTMENT IS 180 DAYS. AN ANALYSIS OF THE SKILLS AND KNOWLEDGE FOR EACH OF THE MAJOR AREAS AND A REFERENCE BIBLIOGRAPHY ARE INCLUDED. AN INSTRUCTOR'S GUIDE (VT 002 087) IS AVAILABLE FOR 50 CENTS. (FM)

AVAILABILITY: INDUSTRIAL EDUCATION, 103 INDUSTRIAL EDUCATION BUILDING, UNIVERSITY OF MISSOURI, COLUMBIA, MISSOURI 65201 (\$1.50).

INSTITUTION NAME: MISSOURI UNIV., COLUMBIA. DEPT. OF INDUSTRIAL EDUCATION; MISSOURI STATE DEPT. OF EDUCATION, JEFFERSON CITY. INDUSTRIAL EDUCATION SECTI

ACCESSION NUMBERS:

VT001356

133

PUBLICATION DATE: 66

TITLE: INDUSTRIAL ARTS. CAREER GUIDANCE SERIES. CURRICULUM BULLETIN, 1966-67  
SERIES NO. 8J.

DESCRIPTOR: \*INDUSTRIAL ARTS; \*RESOURCE MATERIALS; \*JUNIOR HIGH SCHOOLS;  
\*CAREER PLANNING; POWER MECHANICS; CONSTRUCTION INDUSTRY; BUILDING TRADES;  
OFFICE MACHINES

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 189P.

ISSUE: AIM FALL1970

THIS RESOURCE GUIDE IS FOR TEACHERS OF INDUSTRIAL ARTS IN THE CAREER GUIDANCE PROGRAM TO USE IN PROVIDING PUPILS WITH INDUSTRIAL ACTIVITIES AND RELATED ACADEMIC EXPERIENCES AT THE JUNIOR HIGH SCHOOL LEVEL. IT WAS DEVELOPED BY A GROUP OF SUPERVISORS AND TEACHERS AS AN EXPERIMENTAL STUDY TO CREATE A PROGRAM FOR POTENTIAL DROPOUT STUDENTS AND REVISED DURING THREE YEARS OF TRIAL AND EVALUATION. THE GUIDE PRESENTS SUGGESTED METHODS, MATERIALS, AND INSTRUCTIONAL AIDS IN FOUR AREAS: (1) GENERAL CONSTRUCTION AND REPAIR, (2) BUILDING CONSTRUCTION AND MAINTENANCE, (3) POWER MECHANIC, AND (4) OFFICE DUPLICATING MACHINES. EACH AREA CONTAINS A LIST OF PROCESSES AND SKILLS TO BE TAUGHT, RELATED ACADEMIC LEARNINGS TO BE DEVELOPED, MATERIALS, TOOLS, AND EQUIPMENT TO BE USED, AND SUGGESTED RESOURCE LESSONS. A RELATED SUPPLEMENT IS AVAILABLE AS VT 000 239 (ALSO IN THIS ISSUE). (GR)

AVAILABILITY: BOARD OF EDUCATION OF THE CITY OF NEW YORK, PUBLICATIONS SALES OFFICE, 110 LIVINGSTON STREET, BROOKLYN, NEW YORK 11201 (\$2.00).

INSTITUTION NAME: NEW YORK CITY BOARD OF EDUCATION, N.Y.

ACCESSION NUMBERS:

VT000234

334

PUBLICATION DATE: 67

TITLE: INDUSTRIAL ARTS SUPPLEMENT. CAREER GUIDANCE SERIES. CURRICULUM BULLETIN,  
1967-68 SERIES, NO. 3D.

DESCRIPTOR: \*INDUSTRIAL ARTS; \*RESOURCE GUIDES; \*RESOURCE MATERIALS;  
CONSTRUCTION INDUSTRY; POWER MECHANICS; \*LESSON PLANS; \*TEACHING PROCEDURES;  
PRINTING; MAINTENANCE; WORKSHEETS; JUNIOR HIGH SCHOOL STUDENTS

IDENTIFIER: \*CAREER GUIDANCE SERIES

EDRS PRICE: MF AVAILABLE IN VT-ERIC SET.

DESCRIPTIVE NOTE: 197P.

ISSUE: AIM FALL 1970

THIS RESOURCE GUIDE OFFERS INDUSTRIAL ARTS TEACHERS PROJECT IDEAS AND GUIDES  
FOR DEVELOPING SHOP ACTIVITIES IN THE FOLLOWING MAJOR INDUSTRIAL AREAS: GENERAL  
CONSTRUCTION AND REPAIR, BUILDING CONSTRUCTION AND MAINTENANCE, POWER MECHANICS,  
AND IN-PLANT PRINTING. THE PROJECTS IN EACH AREA INCLUDE MATERIALS AND EQUIPMENT  
LISTS, VISUAL AIDS, PROCEDURES, OUTCOMES, REFERENCES, AND ASSIGNMENTS. THE GUIDE  
ALSO CONTAINS PLANS AND SUGGESTIONS FOR ORGANIZING A MULTI-AREA SHOP TO PROVIDE  
THE PUPILS WITH A DIVERSIFIED PROGRAM OF SHOP EXPERIENCES. TWENTY-NINE OPERATION  
SHEETS ARE APPENDED. THIS GUIDE IS TO BE USED IN CONJUNCTION WITH "INDUSTRIAL  
ARTS" AVAILABLE AS VT 001 359 (ALSO IN THIS ISSUE). (GR)

AVAILABILITY: BOARD OF EDUCATION OF THE CITY OF NEW YORK, PUBLICATIONS SALES  
OFFICE, 110 LIVINGSTON STREET, BROOKLYN, NEW YORK 11201 (\$4.00).

INSTITUTION NAME: NEW YORK CITY BOARD OF EDUCATION, N.Y.